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     FILE 'REGISTRY' ENTERED AT 11:27:33 ON 07 OCT 2010
                EXP HYDROXYETHYL/CN
                EXP HYDROXYETHYLSTARCH/CN
                EXP HYDROXYETHYL STARCH/CN
L1              1 S E3
                EXP HYDROXYETHYL AMYLOPECTIN/CN
L2              1 S E3
L3              1 S E4

     FILE 'HCAPLUS' ENTERED AT 11:28:39 ON 07 OCT 2010
L4           2856 S L1-L3
L5         199427 S (STERILE OR STERILIZATION OR PHYSIOLOGICAL OR INTRAVENOUS)
L6            170 S L4 AND L5
L7         406196 S (MOLECULAR WEIGHT OR MW OR DALTON OR KILODALTON OR KDA OR DA)
L8             10 S L6 AND L7
L9           1085 S L1/THU OR L2/THU OR L3/THU
L10           102 S L7 AND L9

     FILE 'STNGUIDE' ENTERED AT 12:02:47 ON 07 OCT 2010

     FILE 'HCAPLUS' ENTERED AT 12:03:24 ON 07 OCT 2010
L11            69 S L10 AND (PY<2006 OR AY<2006 OR PRY<2006)
L12       1130548 S INTRAVENOUS OR PLASMA OR (VOLUME EXPANDER) OR (DEGREE OF SUBS
L13            42 S L11 AND L12
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=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                       0.22       0.22

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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    6 OCT 2010  HIGHEST RN 1245698-26-3
DICTIONARY FILE UPDATES:   6 OCT 2010  HIGHEST RN 1245698-26-3

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2010.

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=> exp hydroxyethyl/cn
E1            1     HYDROXYETHOXYDIMETHYLSILANE/CN
E2            1     HYDROXYETHOXYETHYL HYDROGEN MALEATE/CN
E3            0 --> HYDROXYETHYL/CN
E4            1     HYDROXYETHYL 1-METHYLALLYL CELLULOSE/CN
E5            1     HYDROXYETHYL 2-(2-HYDROXY-3-(OCTADECYLOXY)PROPOXY)ETHYL 2-(2
                    -HYDROXY-3-SULFOPROPOXY)ETHYL CELLULOSE SODIUM SALT/CN
E6            1     HYDROXYETHYL 2-(2-HYDROXY-3-(OCTADECYLOXY)PROPOXY)ETHYL CELL
                    ULOSE/CN
E7            1     HYDROXYETHYL 2-(2-HYDROXY-3-SULFOPROPOXY)ETHYL CELLULOSE SOD
                    IUM SALT/CN
E8            1     HYDROXYETHYL 2-(P-2-PYRIDYLPHENYL)PROPIONATE/CN
E9            1     HYDROXYETHYL 3-(3,5-DI-TERT-BUTYL-4-HYDROXYPHENYL)PROPIONATE
                    /CN
E10           1     HYDROXYETHYL 3-DODECYLOXY-2-HYDROXYPROPYL CELLULOSE PHOSPHAT
                    E/CN
E11           1     HYDROXYETHYL 3-STEARYLOXY-2-HYDROXYPROPYL CELLULOSE/CN
E12           1     HYDROXYETHYL 3-STEARYLOXY-2-HYDROXYPROPYL CELLULOSE PHOSPHAT
                    E/CN

=> exp hydroxyethylstarch/cn
E1            1     HYDROXYETHYLPACHYMAN/CN
E2            1     HYDROXYETHYLPUERARIN/CN
E3            0 --> HYDROXYETHYLSTARCH/CN
E4            1     HYDROXYETHYLTHEOBROMINE/CN
E5            1     HYDROXYETHYLTHEOPHYLLINE/CN
E6            1     HYDROXYETHYLTHIAMINE/CN
E7            1     HYDROXYETHYLTHIAMINEMONOPHOSPHATE/CN
E8            1     HYDROXYETHYLTHIAZOLE KINASE/CN
E9            1     HYDROXYETHYLTHIAZOLE KINASE (4-METHYL-5-BETA-HYDROXYETHYLTHI
                    AZOLE KINASE) (LACTOBACILLUS SAKEI SAKEI STRAIN 23K GENE THI
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                  M)/CN
E10           1     HYDROXYETHYLTHIAZOLE KINASE (4-METHYL-5-BETA-HYDROXYETHYLTHI
                    AZOLE KINASE) (THZ KINASE) (TH KINASE) (METHANOGENIC ARCHAEO
                    N RICE CLUSTER IMRE50 GENE THIM)/CN
E11           1     HYDROXYETHYLTHIAZOLE KINASE (ACINETOBACTER BAUMANNII STRAIN
                    ATCC 17978)/CN
E12           1     HYDROXYETHYLTHIAZOLE KINASE (ACINETOBACTER STRAIN ADP1 GENE
                    THIM)/CN

=> exp hydroxyethyl starch/cn
E1            1     HYDROXYETHYL PROPYL CELLULOSE/CN
E2            1     HYDROXYETHYL RADICAL/CN
E3            1 --> HYDROXYETHYL STARCH/CN
E4            1     HYDROXYETHYL STARCH 130/0.4/CN
E5            1     HYDROXYETHYL STARCH ARGININE ESTER/CN
E6            1     HYDROXYETHYL STARCH LYSINE ESTER/CN
E7            1     HYDROXYETHYL STARCH-POLYETHYLENE GLYCOL DIISOCYANATE COPOLYM
                    ER/CN
E8            1     HYDROXYETHYL STEARYL ETHER/CN
E9            1     HYDROXYETHYL TETRADECYL CELLULOSE/CN
E10           1     HYDROXYETHYL TETRAHYDROPYRANYL CELLULOSE/CN
E11           1     HYDROXYETHYL THIAZOLE KINASE (STAPHYLOCOCCUS AUREUS STRAIN M
                    U50 GENE THIM)/CN
E12           1     HYDROXYETHYL THIAZOLE KINASE (STAPHYLOCOCCUS EPIDERMIDIS STR
                    AIN ATCC12228 GENE SE1691)/CN

=> s e3
L1            1 "HYDROXYETHYL STARCH"/CN

=> exp hydroxyethyl amylopectin/cn
E1            1     HYDROXYETHYL ALLYL ETHER-TRIFLUOROCHLOROETHENE-UNDECENOIC AC
                    ID-VINYL ACETATE COPOLYMER/CN
E2            1     HYDROXYETHYL AMIDES/CN
E3            1 --> HYDROXYETHYL AMYLOPECTIN/CN
E4            1     HYDROXYETHYL AMYLOSE/CN
E5            1     HYDROXYETHYL CARBAMATE/CN
E6            1     HYDROXYETHYL CARBAMATE DIMETHYLOL DIMETHYL ETHER/CN
E7            1     HYDROXYETHYL CARBOXYMETHYL CELLULOSE/CN
E8            1     HYDROXYETHYL CELLULOSE/CN
E9            1     HYDROXYETHYL CELLULOSE 1-OXO-N-OCTADECYL ETHER, 3-SULFO-2-HY
                    DROXYPROPYL ETHER/CN
E10           1     HYDROXYETHYL CELLULOSE 2,4-DICHLORO-S-TRIAZIN-6-YL ETHER/CN
E11           1     HYDROXYETHYL CELLULOSE 2-HYDROXY-N-OCTADECYL ETHER, 3-SULFO-
                    2-HYDROXYPROPYL ETHER/CN
E12           1     HYDROXYETHYL CELLULOSE 2-HYDROXYOCTADECYL 2-SULFOETHYL ETHER
                    /CN

=> s e3
L2            1 "HYDROXYETHYL AMYLOPECTIN"/CN

=> s e4
L3            1 "HYDROXYETHYL AMYLOSE"/CN

=> file hcaplus
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                     ENTRY    SESSION
FULL ESTIMATED COST                                  17.48      17.70

FILE 'HCAPLUS' ENTERED AT 11:28:39 ON 07 OCT 2010
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FILE COVERS 1907 - 7 Oct 2010 VOL 153 ISS 15
FILE LAST UPDATED: 6 Oct 2010 (20101006/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2010

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2010.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

```
=> s l1-l3
          2824 L1
            12 L2
            24 L3
L4         2856 (L1 OR L2 OR L3)

=> s (sterile or sterilization or physiological or intravenous)
         33544 STERILE
         57652 STERILIZATION
         66450 PHYSIOLOGICAL
         45753 INTRAVENOUS
L5      199427 (STERILE OR STERILIZATION OR PHYSIOLOGICAL OR INTRAVENOUS)

=> s l4 and l5
L6          170 L4 AND L5

=> s (molecular weight or mw or dalton or kilodalton or kda or da)
        1475622 MOLECULAR
         196557 WEIGHT
          84326 MOLECULAR WEIGHT
                  (MOLECULAR(W)WEIGHT)
          93687 MW
          11328 DALTON
          16279 KILODALTON
         163908 KDA
          58569 DA
L7       406196 (MOLECULAR WEIGHT OR MW OR DALTON OR KILODALTON OR KDA OR DA)

=> s l6 and l7
L8           10 L6 AND L7

=> d l8 1-10 ti abs bib
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L8 ANSWER 1 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Chemically modified konjac glucomannan with high colloid osmotic pressure: Physiological evaluation in a rabbit model as a plasma substitute
AB Carboxylmethylated konjac glucomannan (CKGM) is a carboxylmethylated polymer of mannose and glucose that is derived from the plant Amorphophallus konjac cultivated in East Asia. The CKGM solution had a high volume-expanding efficacy and was evaluated as a plasma substitute in the present study. Ameliorative hemorrhagic shock rabbits were used as the model animals. The in vivo hemodynamic and hemorheol. properties, including blood pressure, blood viscosity, hematocrit, erythrocyte deformation index and erythrocyte aggregation index, were measured in animals treated in the CKGM solution The in vitro colloid osmotic pressure (COP) of the CKGM solution was measured to estimate its plasma-expanding efficacy. These parameters of the CKGM-treated group were compared with groups exposed to 4 other treatments: human serum albumin (HSA), hydroxyethyl starch (HES), polygeline and normal saline. The CKGM solution showed an exceptionally higher COP than other therapy solns. For example, the COP of 1% (weight in volume [w/v]) CKGM solution is comparable to those of 6% (w/v) HES solution and 5% (w/v) HSA solution Accordingly, the CKGM solution can be transfused in a much lower dosage while maintaining its plasma-expanding efficacy. The CKGM-treated group showed an improved intravascular persistence and good hemodynamic and hemorheol. properties. Biopsy anal. suggested no organ dysfunction in the group treated in CKGM solution Moreover, the high plasma-expanding efficacy and inexpensive availability of the CKGM solution may facilitate its clin. application as a potential plasma substitute.
AN 2010:833960 HCAPLUS <<LOGINID::20101007>>
DN 153:343067
TI Chemically modified konjac glucomannan with high colloid osmotic pressure: Physiological evaluation in a rabbit model as a plasma substitute
AU Li, Suping; Hu, Tao; Chen, Yali; Wang, Xianwei; Liu, Tao; Ma, Guanghui; Su, Zhiguo
CS National Key Laboratory of Biochemical Engineering, Institute of Process Engineering, Beijing, 100190, Peop. Rep. China
SO Glycobiology (2010), 20(8), 950-958
CODEN: GLYCE3; ISSN: 0959-6658
PB Oxford University Press
DT Journal
LA English
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of hypertonic-hyperoncotic solution on cardiac function and extravascular lung water in children after open-heart surgery
AB The effects of hypertonic-hyperoncotic solution (HHS) on cardiac function and extravascular lung water in children after open-heart surgery for congenital cardiac disease were evaluated. Fifty children with congenital cardiac disease were randomly assigned to 2 groups. The HHS group received HHS (7.5% sodium chloride with 6% hydroxyethyl starch 200 kDa). The ISS group (the control group) received isotonic saline solution (ISS 0.9% sodium chloride). Cardiac index (CI), extravascular lung water index (ELWI), stroke volume index (SVI), mean arterial pressure (MAP), and systemic vascular resistance index (SVRI) were measured. Immediately after surgery, patients were loaded either with HHS or with ISS (4 mL/kg). Sodium concentration, osmolality, thrombocyte count (TC), fibrinogen, and arterial blood gases were detected before operation, immediately after loading, 15 min, 1, 4, 12, and 24 h after the end of volume loading. Hemodynamic parameters were recorded at the same time. The total amount of

dobutamine required was documented. In HHS group, MAP, SVI and CI increased, and SVRI decreased significantly after the administration of HHS, compared with ISS group and before administration (P<0.01 or 0.05). Both CVP and HR were unchanged in both groups. In HHS group, ELWI decreased significantly, compared with before volume administration. But ELWI increases directly and remained elevated for 60 min after the administration of ISS. Sodium concentration increased immediately after infusion of HHS. The postoperative need for infused dobutamine in the patients in HHS group was decreased, compared with ISS group (P<0.05). All patients left the hospital in a clin. sufficient state. A single infusion of HHS after cardiac surgery was safe. After cardiopulmonary bypass surgery, the administration of HHS increased CI by elevating SVI in combination with a decreased SVRI. ELWI significantly decreased, which suggested that HHS effectively counteracted the capillary leakage.

AN 2009:1145934 HCAPLUS <<LOGINID::20101007>>
DN 152:165930
TI Effects of hypertonic-hyperoncotic solution on cardiac function and extravascular lung water in children after open-heart surgery
AU Li, Danfeng; Wan, Xi; Cheng, Bangchang; Xu, Jinjin
CS Department of Anaesthesiology, Renmin Hospital, Wuhan University, Wuhan, Hubei Province, 430060, Peop. Rep. China
SO Zhongguo Yishi Zazhi (2008), 10(12), 1625-1628
CODEN: ZYZHAD; ISSN: 1008-1372
PB Zhongguo Yishi Zazhishe
DT Journal
LA Chinese

L8 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effect of medium-molecular-weight hydroxyethyl starch on the functions of blood coagulation and fibrinolysis
AB The study was performed in 30 adult patients, ASA grade I-II, scheduled for selective surgery, which were randomly allocated to receiving i.v. infusion of 6% HAES-sterile (HES) group, lactated Ringer's solution (RL), at the rate of 20mL·kg-1·h-1 for 60min, resp., with 15 case in each group. Venous blood samples were taken before and after 1h following the infusion to deterion: Hb (Hb), hematocrit (HCT), platelet count (PLT), platelet aggregation test (PAG) [involve PAG(1), PAG(5), PAG(M), T(M)], activated partial thromboplastin time (APTT), prothrombin time (PT), thrombin time (TT), fibrinogen (FIB), tissue plasminogen activator (t-PA), plasminogen activator inhibitor (PAI-1). In HES group, Hb, HCT, PLT, PAG(1) decreased significantly, PT, APTT was prolonged remarkably after infusion, and Hb, HCT, HLT, APTT had marked difference than those in the control group. Following i.v. hydroxyethyl starch, there wre no influences on the circulation and fibrinolysis. HAES-sterile 6% had significant effect on intrinsic factors of blood coagulation, but this change was inside the normal range.
AN 2006:279120 HCAPLUS <<LOGINID::20101007>>
DN 145:20796
TI Effect of medium-molecular-weight hydroxyethyl starch on the functions of blood coagulation and fibrinolysis
AU Xu, Xue; Zhao, Yanli; Jin, Hailong; Cheng, Huiping; Yang, Binxia; Wang, Baoguo
CS Affiliated Beijing Tiantan Hospital, Capital University of Medical Sciences, Beijing, 100050, Peop. Rep. China
SO Zhongguo Quanke Yixue (2005), 8(7), 553-555
CODEN: ZQYHAK; ISSN: 1007-9572
PB Zhongguo Quanke Yixue Zazhishe
DT Journal
LA Chinese

L8 ANSWER 4 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Novel pathways in the etiology of cancer, and treatment methods
AB The invention pertains to the identification of two novel epithelial signaling pathways in ER-pos. breast cancers and the discovery that the cellular biol. and (likely also the clin. outcome) of ER-pos. breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF-κB activation and/or DNA binding is implicated in the etiol. of ER-pos. breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by phosphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDA) ER as well as the phorphorylating activation of a truncated and nuclear-localized ER variant (.apprx.52 kDa). Also disclosed are methods for identifying patients likely to respond to hormonal therapy and for selecting a therapeutic regimen for the treatment of cancer.
AN 2006:101964 HCAPLUS <<LOGINID::20101007>>
DN 144:184652
TI Novel pathways in the etiology of cancer, and treatment methods
IN Benz, Christopher C.
PA Buck Institute for Age Research, USA
SO U.S. Pat. Appl. Publ., 49 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20060024691	A1	20060202	US 2005-90546	20050324
PRAI US 2004-556774P	P	20040325		
US 2004-580534P	P	20040616		
US 2004-629691P	P	20041119		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

L8 ANSWER 5 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Pharmaceutical combinations gadolinium complexes and colloidal biopolymers and their use as i.v. injection and i.v. infusion contrast agents in MR angiography
AB The invention concerns pharmaceutical combinations that contain a low mol. weight gadolinium complex and a biopolymer in pharmaceutical acceptable carrier; the Gd-complex is in molecularly dispersed form and the biopolymer is colloidally disolved. Gd-DTPA or gadobutrol are formulated with hydroxyethyl starch or acetyl starch. I.v. injections and i.v. infusions for whole body MRI are formulated, especially angiog. and MRI perfusion studies. Field of application is the imaging of cerebrospinal injuries. Thus 10 mL sterile injection solution contained (g): gadopentetic acid dimeglumine salt 4.690; diethylene triamine pentaacetic acid 0.004; meglumine 0.010; hyroxyethyl starach 0.7000; water 6.985.
AN 2005:822089 HCAPLUS <<LOGINID::20101007>>
DN 143:199930
TI Pharmaceutical combinations gadolinium complexes and colloidal biopolymers and their use as i.v. injection and i.v. infusion contrast agents in MR angiography
IN Tack, Johannes
PA Neurobiotec G.m.b.H., Germany
SO Ger. Offen., 7 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI	DE 102004006048	A1	20050818	DE 2004-102004006048	20040202
	DE 102004006048	B4	20091126		
PRAI	DE 2004-102004006048		20040202		

L8 ANSWER 6 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Medicinal agent with volemic effect and method for its preparing
AB The medicinal agent represents hydroxyethylated starch in an aqueous solution containing 5-10% of hydroxyethylated starch with the optimal ratio of substituted hydroxyethyl groups at atoms C2/C6 up to 6:1 in glucose residue, average value of mol. mass 130-450 kDa, narrowed mol.-mass distribution at the substitution degree 0.35-0.70 and 0.80-1.00% of sodium chloride. The agent is prepared using maize or potato starch as the raw material with the content of amylopectin 95%, not less. Starch is subjected for alkaline purification, acidic or enzymic hydrolysis up to preparing products with mol. mass 400-900 kDa up to the required degree of substitution of hydroxyethyl groups. The solution is purified from impurities by ultrafiltration and/or reverse osmosis and purification is carried out using apyrogenic activated carbon and/or by sterilizing filtration and the following thermal sterilization of the end product. The invention provides a new agent for rapid blood pressure recovery after blood loss.
AN 2005:120436 HCAPLUS <<LOGINID::20101007>>
DN 142:162697
TI Medicinal agent with volemic effect and method for its preparing
IN Panov, V. P.; Korotaev, G. K.; Kir'yanov, N. A.; Panov, A. V.; Dolotov, S. M.; Leshnevskii, K. A.; Grineva, L. P.; Kotova, Yu. A.
PA Russia
SO Russ., No pp. given
CODEN: RUXXE7
DT Patent
LA Russian
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	RU 2245714	C1	20050210	RU 2003-126930	20030904
PRAI	RU 2003-126930		20030904		

L8 ANSWER 7 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Blood plasma substitutes containing hydroxyethyl starch with good pH stability, and plastic bags filled with them
AB Blood plasma substitutes contain hydroxyethyl starch (HES) (Mw 150,000-300,000), Na+ and Cl- as the only electrolytes, and citrate ion as a pH-adjusting agent. A solution (pH 6.5) containing HES (30 g), NaCl (4.5 g), an aqueous 1% Na citrate solution (1.53 mL), and H2O to 100 mL showed pH 5.92 after 30-day storage at 40° after sterilization at 115° for 15 min in a polypropylene bag.
AN 2004:429918 HCAPLUS <<LOGINID::20101007>>
DN 140:412290
TI Blood plasma substitutes containing hydroxyethyl starch with good pH stability, and plastic bags filled with them
IN Tono, Hiroshi; Fujino, Keiichi; Toyama, Toshihiro
PA Nihon Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI JP 2004149450 A 20040527 JP 2002-315846 20021030
PRAI JP 2002-315846 20021030

L8 ANSWER 8 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Vaccine composition comprising an immunologically active substance embedded in microparticles consisting of starch with reduced molecular weight
AB A vaccine composition is disclosed which comprises an immunol. active substance embedded in microparticles essentially consisting of starch having an amylopectin content exceeding 85 % by weight, of which at least 80 % by weight has an average mol. weight within the range of 10-10,000 kDa. A process for preparing such vaccine composition is also disclosed.
AN 2002:275771 HCAPLUS <<LOGINID::20101007>>
DN 136:299676
TI Vaccine composition comprising an immunologically active substance embedded in microparticles consisting of starch with reduced molecular weight
IN Joensson, Monica; Larsson, Karin; Gustafsson, Nils Ove; Laakso, Timo; Reslow, Mats
PA Bioglan AB, Swed.
SO PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002028371	A1	20020411	WO 2001-SE2169	20011005
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	SE 2000003615	A	20020407	SE 2000-3615	20001006
	SE 517421	C2	20020604		
	CA 2424936	A1	20020411	CA 2001-2424936	20011005
	AU 2001092529	A	20020415	AU 2001-92529	20011005
	US 20020044976	A1	20020418	US 2001-970793	20011005
	US 6706288	B2	20040316		
	EP 1322290	A1	20030702	EP 2001-972895	20011005
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	JP 2004510724	T	20040408	JP 2002-531997	20011005
	CN 100352427	C	20071205	CN 2001-816855	20011005
	US 20020098203	A1	20020725	US 2002-970794	20020110
	US 20030211167	A1	20031113	US 2003-461445	20030616
	US 6692770	B2	20040217		
	US 20040115281	A1	20040617	US 2003-705204	20031110
	US 7105181	B2	20060912		
PRAI	SE 2000-3615	A	20001006		
	US 2001-260455P	P	20010108		
	US 2001-970793	A3	20011005		
	WO 2001-SE2169	W	20011005		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Ifosfamide lyophilizate preparations
AB The invention relates to improved ifosfamide prepns. which are distinguished in that as primary auxiliary a polysaccharide, in general a glycan, preferably dextran, starches or cellulose, in particular dextrans having an MW of 20,000 to 85,000, modified starches such as hydroxyethyl starch and chemical modified celluloses such as hydroxyethylcellulose and sodium CM-cellulose, a glycol ether, preferably polyethylene glycol, in particular polyethylene glycols having a mol. weight of 600 to 6000 or an amino acid, preferably alanine, leucine or glutamic acid, is added to them. The improved ifosfamide preparation can also contain as an auxiliary a pharmaceutically customary buffer, for example acetate, citrate or tris buffer, preferably phosphate buffer. In addition, improved ifosfamide prepns. are obtained by addition of NaHCO3. The ifosfamide prepns. according to the invention can comprise one or a combination of several auxiliaries. Mesna can be added to the formulation as a uroprotector. Ifosfamide 1000 g and alanine 337.3 g were dissolved in 8 L water and the solution was made up to a final volume of 10 L and sterile-filtered. The solution was dispensed under aseptic conditions into sterilized glass vials at 10.0 mL per vial. The vials were transferred to a freeze-drying unit and cooled to a temperature of -40°.
AN 1998:300520 HCAPLUS <<LOGINID::20101007>>
DN 129:8602
OREF 129:1853a,1856a
TI Ifosfamide lyophilizate preparations
IN Wichert, Burkhard; Sauerbier, Dieter; Rawert, Jurgen
PA Asta Medica Aktiengesellschaft, Germany
SO U.S., 4 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5750131	A	19980512	US 1996-752069	19961119
PRAI US 1996-752069		19961119		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of intravenous pentafraction on lung and soft tissue liquid exchange in hypoproteinemic sheep
AB Effects of infusing pentafraction (Pen), a synthetic hydroxyethyl starch plasma volume expander, on lung and soft tissue lymph flux were compared in nonanesthetized sheep that were protein depleted by batch plasmapheresis. Pen (5%) was infused to raise pulmonary arterial wedge pressure by 5 mmHg for 2 h (1.8). Pen raised plasma osmotic pressure from plasmapheresis baseline (10.7 mmHg; pre-plasmapheresis baseline, 19.6 mmHg) to 16.6 mmHg. After Pen, lung lymph flows peaked at 3.9 times a pre-plasmapheresis baseline value of 1.0 (plasmapheresis baseline, 2.7), but soft tissue lymph flows rose insignificantly. Plasma Pen concns. were 2.3% postinfusion and 1.6% at 12 h. Pen mean mol. masses at these times, measured by high-performance liquid chromatog., were 160 and 129 kDa , resp. In lung lymph, Pen concns. were 0.8% postinfusion and 0.7% at 12 h, with mean mol. masses of 125 and 112 kDa, resp. In soft tissue, lymph Pen was nearly undetectable postinfusion, but at 12 h, concns. averaged 0.3% with a mean mol. mass of 80 kDa. The

osmotic effectiveness of Pen may be related to its mol. mass, which was large enough to restrict filtration so that the plasma-to-lung lymph osmotic pressure gradient widened. Pen remained effective in the circulation for at least 24 h.
AN 1994:69160 HCAPLUS <<LOGINID::20101007>>
DN 120:69160
OREF 120:12263a,12266a
TI Effects of intravenous pentafraction on lung and soft tissue liquid exchange in hypoproteinemic sheep
AU Conhaim, R. L.; Rosenfeld, D. J.; Schreiber, M. A.; Baaske, D. M.; Harms, B. A.
CS Dep. Surg., Univ. Wisconsin, Madison, WI, 53705, USA
SO American Journal of Physiology (1993), 265(5, Pt. 2), H1536-J1543
CODEN: AJPHAP; ISSN: 0002-9513
DT Journal
LA English
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

=> d his log hold
'LOG' IS NOT VALID HERE
For an explanation, enter "HELP DISPLAY HISTORY".

=> d his

(FILE 'HOME' ENTERED AT 11:27:18 ON 07 OCT 2010)

FILE 'REGISTRY' ENTERED AT 11:27:33 ON 07 OCT 2010
EXP HYDROXYETHYL/CN
EXP HYDROXYETHYLSTARCH/CN
EXP HYDROXYETHYL STARCH/CN
L1 1 S E3
EXP HYDROXYETHYL AMYLOPECTIN/CN
L2 1 S E3
L3 1 S E4

FILE 'HCAPLUS' ENTERED AT 11:28:39 ON 07 OCT 2010
L4 2856 S L1-L3
L5 199427 S (STERILE OR STERILIZATION OR PHYSIOLOGICAL OR INTRAVENOUS)
L6 170 S L4 AND L5
L7 406196 S (MOLECULAR WEIGHT OR MW OR DALTON OR KILODALTON OR KDA OR DA)
L8 10 S L6 AND L7

=> log hold

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	36.82	54.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-8.50	-8.50

SESSION WILL BE HELD FOR 120 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 11:29:59 ON 07 OCT 2010

Connecting via Winsock to STN

Welcome to STN International! Enter x:X

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LOGINID:SSPTAEXO1623

PASSWORD:
 * * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'HCAPLUS' AT 12:02:08 ON 07 OCT 2010
FILE 'HCAPLUS' ENTERED AT 12:02:08 ON 07 OCT 2010
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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    36.82      54.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -8.50      -8.50

=> s l1/thu or l2/thu or l3/thu
          2824 L1
       1300368 THU/RL
          1083 L1/THU
                 (L1 (L) THU/RL)
            12 L2
       1300368 THU/RL
             1 L2/THU
                 (L2 (L) THU/RL)
            24 L3
       1300368 THU/RL
             1 L3/THU
                 (L3 (L) THU/RL)
L9        1085 L1/THU OR L2/THU OR L3/THU

=> s l7 and l9
L10        102 L7 AND L9

=> file stnguide
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    39.73      57.43

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -8.50      -8.50

FILE 'STNGUIDE' ENTERED AT 12:02:47 ON 07 OCT 2010
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Oct  1, 2010 (20101001/UP).

=> fiel hcaplus
FIEL IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> file hcaplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.07      57.50
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)       SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00      -8.50

FILE 'HCAPLUS' ENTERED AT 12:03:24 ON 07 OCT 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE COVERS 1907 - 7 Oct 2010  VOL 153 ISS 15
FILE LAST UPDATED: 6 Oct 2010  (20101006/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED:  Aug 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE:  Aug 2010

HCAplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2010.
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This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s l10 and (PY<2006 or AY<2006 or PRY<2006)
      26341581 PY<2006
       5556094 AY<2006
       5045948 PRY<2006
L11          69 L10 AND (PY<2006 OR AY<2006 OR PRY<2006)

=> s intravenous or plasma or (volume expander) or (degree of substitution)
         45753 INTRAVENOUS
       1084989 PLASMA
        142479 VOLUME
          3937 EXPANDER
            31 VOLUME EXPANDER
                 (VOLUME(W)EXPANDER)
       4810767 DEGREE
        310750 SUBSTITUTION
          7971 DEGREE OF SUBSTITUTION
                 (DEGREE(1W)SUBSTITUTION)
L12    1130548 INTRAVENOUS OR PLASMA OR (VOLUME EXPANDER) OR (DEGREE OF SUBSTIT
               UTION)

=> s l11 and l12
L13          42 L11 AND L12

=> d l13 1-42 ti abs bib
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L13 ANSWER 1 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI An improved process for producing pyrogen-free narrow molecular weight distribution tetrastarch as a plasma volume expander
AB An improved process for for producing pyrogen-free tetrastarch, used as a plasma volume expander, involves hydrolyzing the waxy starch to achieve a mol. weight distribution of 110,000-150,000 daltons. A molar substitution of 0.35-0.45 is achieved by attachment of hydroxyethyl group. An organic solvent used till tetrastarch becomes free from salt and glycol content. Microfiltration is used to reduce microorganism load (bio-burden) and ultrafiltration to reduce pyrogen and low as well as high mol. weight undesired fragments. A spray dryer is used to obtain dried tetrastarch with the min. moisture content.
AN 2009:808651 HCAPLUS <<LOGINID::20101007>>
DN 152:554662
TI An improved process for producing pyrogen-free narrow molecular weight distribution tetrastarch as a plasma volume expander
PA Claris Lifesciences Limited, India
SO Indian Pat. Appl., 15pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2004MU00423	A	20090626	IN 2004-MU423	20040408 <--
PRAI IN 2004-MU423		20040408 <--		

L13 ANSWER 2 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of PentaLyte and Voluven hemodilution on plasma coagulation kinetics in the rabbit: role of thrombin-fibrinogen and factor XIII-fibrin polymer interactions
AB Background: Hydroxyethyl starch (HES) administration has resulted in decreased hemostasis and fibrinogen (Fl)-thrombin-(FIIa)-Factor XIII (FXIII) interactions. I proposed to determine the hemostatic effect of hemodilution with PentaLyte (6% HES, mean mol. weight 220 kDa) and Voluven (6% HES, 130 kDa). Methods: Rabbits were i.v. administered 20 mL/kg PentaLyte or Voluven (n = 8 per fluid) over 10 min. Plasma was obtained prior to, 1 min and 1 h after hemodilution. Thrombelastog. was performed, with clot initiation (R, sec), clot propagation (α, degrees), and clot strength (shear elastic modulus, G, dynes/cm2) determined over 20 min. Celite-activated samples had either no addns. or addition of FI, FIIa or activated FXIII (FXIIIa) to restore protein content to pre-diluted values. Results and conclusions: While there were no significant differences between the groups, R significantly decreased 1 h after hemodilution compared with values observed before and 1 min after hemodilution, whereas α and G significantly decreased 1 min after hemodilution and then significantly, but only partially, increased 1 h after hemodilution compared with pre-dilution values. Addition of FI, FIIa and FXIIIa significantly decreased R in both groups. α And G 1 min after hemodilution were significantly enhanced by FI, FIIa, FXIIIa in both groups; however, 1 h after hemodilution, rabbits administered PentaLyte had α and G enhanced only by FI and FXIIIa addition, whereas animals administered Voluven had α and G significantly enhanced by FI addition PentaLyte and Voluven hemodilution initially diminishes FIIa-FI and FXIIIa-fibrin, but within an hour primarily inhibit FXIIIa-fibrin interactions in the rabbit.
AN 2005:1158830 HCAPLUS <<LOGINID::20101007>>
DN 144:163874
TI Effects of PentaLyte and Voluven hemodilution on plasma

coagulation kinetics in the rabbit: role of thrombin-fibrinogen and factor XIII-fibrin polymer interactions
AU Nielsen, V. G.
CS Department of Anesthesiology, The University of Alabama at Birmingham, Birmingham, AL, USA
SO Acta Anaesthesiologica Scandinavica (2005), 49(9), 1263-1271
CODEN: AANEAB; ISSN: 0001-5172
PB Blackwell Publishing Ltd.
DT Journal
LA English
OSC.G 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Production and use of hydroxyethyl starch
AB Hydroxyethyl starch (I) useful in pharmaceuticals and having weight-average mol.
weight (Mn) ≥500,000, degree of substitution (DS) 0.25-0.5, and C2/C6 ratio 2-<8 is prepared Suspending 30 kg wax-cornstarch in 52.2 kg H2Oactivating at 85° with 5.1 g NaOH, adding 4.159 kf liquid ethylene oxide, heating slowly to 40°, stirring for 2 h, reducing Mn by heating with 20% HCl (giving pH 2.0) at 75°, cooling to 50°, and ultrafiltration gave I with DS 0.39, Mw 1520, and C2-C6 ratio 2.3. Use of I as, i.a., a plasma volume expander is exemplified.
AN 2005:979667 HCAPLUS <<LOGINID::20101007>>
DN 143:250014
TI Production and use of hydroxyethyl starch
IN Boll, Michael; Fisch, Andreas; Spahn, Donat R.
PA B. Braun Melsungen A.-G., Germany
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005082942	A2	20050909	WO 2005-EP50877	20050301 <--
WO 2005082942	A3	20060316		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005217157	A1	20050909	AU 2005-217157	20050301 <--
EP 1732953	A2	20061220	EP 2005-708068	20050301 <--
EP 1732953	B1	20071107		
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 1926155	A	20070307	CN 2005-80006765	20050301 <--
BR 2005008285	A	20070807	BR 2005-8285	20050301 <--
JP 2007525588	T	20070906	JP 2007-501278	20050301 <--
AT 377609	T	20071115	AT 2005-708068	20050301 <--
ZA 2006008126	A	20080227	ZA 2006-8126	20050301 <--

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     ES 2294680           T3    20080401    ES 2005-708068         20050301 <--
     RU 2373222           C2    20091120    RU 2006-134639         20050301 <--
     IN 2006CN03159       A     20070608    IN 2006-CN3159         20060831 <--
     KR 2007022672        A     20070227    KR 2006-7020430        20060929 <--
     US 20070282014       A1    20071206    US 2007-590462         20070730 <--
PRAI EP 2004-100813       A     20040301  <--
     WO 2005-EP50877      W     20050301  <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
RE.CNT  6     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13  ANSWER 4 OF 42  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Albumin and hydroxyethyl starch 130 kDa/0.4 improve filter
     clearance and hemocompatibility in hemo- and plasmafiltration--an in vitro
     study
AB   Apart from their standard applications, hemofiltration (HF) and plasma
     filtration (PF) may provide helpful therapy for sepsis, multiple organ-
     and acute liver-failure.  Some colloids cause either decreases or
     increases in blood cell agglomeration.  We hypothesized that solns. which
     reduce cell aggregability may lead to both improved filter clearance and
     better haemocompatibility due to decreasing rates of clogged hollow
     fibers.  Heparinized porcine blood (5 IU/mL) was used in an in vitro
     circuit.  The filter types tested were from GABBRO: HF66D (effective
     membrane surface: 0.6 m2) and PF1000N (effective membrane surface: 0.15
     m2).  Albumin (ALB), hydroxyethyl starch (HES) 200/0.5, HES 130/0.4,
     gelatin (GEL) or normal saline (0.9%) were added to the blood (n =
     6/group).  Recirculation systems were run for 2 h.  Spontaneous hemollysis
     and filter resistance >420 mmHg were selected as indications of maximal
     flow rates.  Sieving coeffs. were determined for 17 parameters at the lowest
     and highest blood flows and filtration rate.  Based on the filter types
     used, supplementation of ALB and HES130/0.4 led to an improved filter
     clearance without increasing the number of clogged capillary membranes or
     causing impaired haemocompatibility.  Sieving coeffs. for most solutes
     were independent of volume substitute and flow rate.  Haemocompatibility and
     filter clearance deteriorated after addition of HES200 or GEL to the blood.
     Under standardized in vitro conditions, we found that colloids which
     reduce cell aggregability cause improved HF- and PF-performance.  This
     phenomenon may provide new options for higher clearances and may lead to
     new concepts in low dose anticoagulation.
AN   2005:886981  HCAPLUS <<LOGINID::20101007>>
DN   144:494927
TI   Albumin and hydroxyethyl starch 130 kDa/0.4 improve filter
     clearance and hemocompatibility in hemo- and plasmafiltration--an in vitro
     study
AU   Unger, Juliane K.; Haltern, Claudia; Dohmen, Bernd; Gressner, Axel;
     Grosse-Siestrup, Christian; Groneberg, David A.; Rossaint, Rolf
CS   Department of Anaesthesiology, University Hospital Aachen,
     Rheinisch-Westfalische Technische Hochschule Aachen, Aachen, Germany
SO   Nephrology, Dialysis, Transplantation (2005), 20(9), 1922-1931
     CODEN: NDTREA; ISSN: 0931-0509
PB   Oxford University Press
DT   Journal
LA   English
OSC.G   3     THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT  20    THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
              ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13  ANSWER 5 OF 42  HCAPLUS  COPYRIGHT 2010 ACS on STN
TI   Antithrombin efficiency is maintained in vitro in human plasma
     following dilution with hydroxyethyl starches
AB   Hemodilution has been associated with changes in hemostasis secondary to
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modulation of procoagulant activity. However, direct effects of specific fluids on anticoagulants, such as antithrombin (AT), remained undefined. Thus, the purpose of this investigation was to determine whether hemodilution with hydroxyethyl starches (HES) directly diminishes plasma AT activity, which would be manifested by decreases in clot initiation time (reaction time, R) with thrombelastog. greater than that seen with 0.9% NaCl (NS). Normal plasma and AT-deficient (< 1% activity) plasma were diluted 0 or 30% with NS, Hextend (6% HES; average mol. weight, 450 kDa), PentaLyte (6% HES; average mol. weight, 220 kDa), or Voluven (6% HES; average mol. weight, 130 kDa) (n = 6-7 expts. per condition). Undiluted, normal plasma had an R value of 796 ± 65 s, which was significantly ($P < 0.05$) greater than R values following NS (690 ± 50 s) or Voluven (675 ± 68 s) dilution R values of normal plasma diluted with Hextend (831 ± 51 s) or PentaLyte (801 ± 72 s) were not different from undiluted plasma but were significantly ($P < 0.05$) greater than those observed following NS or Voluven dilution There were no significant differences between the conditions when AT-deficient plasma was utilized (R range, 404-440 s). Rather than interfere with AT activity, HES with an average mol. weight of 220-450 kDa maintain AT efficiency.

AN 2005:535082 HCAPLUS <<LOGINID::20101007>>
DN 143:359705
TI Antithrombin efficiency is maintained in vitro in human plasma following dilution with hydroxyethyl starches
AU Nielsen, Vance G.
CS Department of Anesthesiology, The University of Alabama at Birmingham, Birmingham, AL, 35249-6810, USA
SO Blood Coagulation & Fibrinolysis (2005), 16(5), 319-322
CODEN: BLFIE7; ISSN: 0957-5235
PB Lippincott Williams & Wilkins
DT Journal
LA English
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 6 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Molecular weight of hydroxyethyl starch: is there an effect on blood coagulation and pharmacokinetics?
AB Background: The development of hydroxyethyl starches (HES) with low impact on blood coagulation but higher volume effect compared with the currently used HES solns. is of clin. interest. We hypothesized that high mol. weight, low-substituted HES might possess these properties. Methods: Thirty pigs were infused with three different HES solns. (20 mL kg-1) with the same degree of molar substitution (0.42) but different mol. wts. (130, 500 and 900 kDa). Serial blood samples were taken over 24 h and blood coagulation was assessed by Thromboelastograph anal. and anal. of plasma coagulation. In addition, plasma concentration and in vivo mol. weight were determined and pharmacokinetic data were computed based on a two-compartment model. Results: Thromboelastograph anal. and plasma coagulation tests did not reveal a more pronounced alteration of blood coagulation with HES 500 and HES 900 compared with HES 130. In contrast, HES 500 and HES 900 had a greater area under the plasma concentration-time curve [1542 (142) g min litre-1, $P<0.001$, 1701 (321) g min litre-1, $P<0.001$] than HES 130 [1156 (223) g min litre-1] and alpha half life ($t\alpha 1/2$) was longer for HES 500 [53.8 (8.6) min, $P<0.01$] and HES 900 [57.1 (12.3) min, $P<0.01$] than for HES 130 [39.9 (10.7) min]. Beta half life ($t\beta 1/2$), however, was similar for all three types of HES [from 332 (100) to 381 (63) min]. Conclusions: In low-substituted HES, mol. weight is not a key factor in compromising blood coagulation. The longer initial intravascular persistence of high mol.

weight low-substituted HES might result in a longer lasting volume effect.
AN 2005:312645 HCAPLUS <<LOGINID::20101007>>
DN 143:146205
TI Molecular weight of hydroxyethyl starch: is there an effect on blood coagulation and pharmacokinetics?
AU Madjdpour, C.; Dettori, N.; Frascarolo, P.; Burki, M.; Boll, M.; Fisch, A.; Bombeli, T.; Spahn, D. R.
CS Department of Anaesthesiology, University Hospital Lausanne, Lausanne, CH-1011, Switz.
SO British Journal of Anaesthesia (2005), 94(5), 569-576
CODEN: BJANAD; ISSN: 0007-0912
PB Oxford University Press
DT Journal
LA English
OSC.G 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Medicinal agent with volemic effect and method for its preparing
AB The medicinal agent represents hydroxyethylated starch in an aqueous solution containing 5-10% of hydroxyethylated starch with the optimal ratio of substituted hydroxyethyl groups at atoms C2/C6 up to 6:1 in glucose residue, average value of mol. mass 130-450 kDa, narrowed mol.-mass distribution at the substitution degree 0.35-0.70 and 0.80-1.00% of sodium chloride. The agent is prepared using maize or potato starch as the raw material with the content of amylopectin 95%, not less. Starch is subjected for alkaline purification, acidic or enzymic hydrolysis up to preparing products with mol. mass 400-900 kDa up to the required degree of substitution of hydroxyethyl groups. The solution is purified from impurities by ultrafiltration and/or reverse osmosis and purification is carried out using apyrogenic activated carbon and/or by sterilizing filtration and the following thermal sterilization of the end product. The invention provides a new agent for rapid blood pressure recovery after blood loss.
AN 2005:120436 HCAPLUS <<LOGINID::20101007>>
DN 142:162697
TI Medicinal agent with volemic effect and method for its preparing
IN Panov, V. P.; Korotaev, G. K.; Kir'yanov, N. A.; Panov, A. V.; Dolotov, S. M.; Leshnevskii, K. A.; Grineva, L. P.; Kotova, Yu. A.
PA Russia
SO Russ., No pp. given
CODEN: RUXXE7
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI RU 2245714	C1	20050210	RU 2003-126930	20030904 <--
PRAI RU 2003-126930		20030904 <--		

L13 ANSWER 8 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Infusion solutions containing polymers for the diagnosis and therapy of tumors
AB The invention concerns infusion solns. containing non-lipophilic, biol. inert macromols. that (a) have mol. wts. of 6-60 kDa; (b) become enriched in tumors because of the altered permeability of tumor vessels; (c) are selected from the group of plasma volume expanders; and (d) there can be small mols. coupled to the macromols. Applied macromols. are gelatin, polysuccinate, hydroxyethyl starch, dextran, inulin,

oxypolygelatin, crosslinked polypeptides, polyhydroxyethyl aspartamide and their mixture The concentration of the macromols. is typically 6-10%. Contrast agents and anticancer agents can be coupled to the polymers.

AN 2004:956508 HCAPLUS <<LOGINID::20101007>>
DN 141:415976
TI Infusion solutions containing polymers for the diagnosis and therapy of tumors
PA Tritthart, Helmut A., Austria
SO Austrian, 5 pp.
CODEN: AUXXAK
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI AT 409929	B	20021227	AT 1997-387	19970307 <--
AT 9700387	A	20020515		
PRAI AT 1997-387		19970307 <--		

L13 ANSWER 9 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The Effects of High Molecular Weight Hydroxyethyl Starch Solutions on Platelets
AB Physicochem. characteristics of hydroxyethyl starch (HES) mols. determine their side effects on hemostasis. Our aim in the present expts. was to test the antiplatelet effect of novel high mol. weight HES. Citrated whole blood was hemodiluted in vitro (0% and 20%) with either HES 550 (Hextend), HES 600 (6%Hetastarch-Baxter), HES 200 (Elohaest), or the solvent of Hextend in its com. available solution The availability of glycoprotein IIb-IIIa was assessed on nonstimulated and on agonist-induced platelets using flow cytometry. Glycoprotein IIb-IIIa availability increased significantly after hemodilution with Hextend and its solvent by 23% and 24%, resp., but decreased in the presence of 6% Hetastarch-Baxter and Elohaest by 18% and 15%, resp., with no significant difference between the latter two colloids. This study shows that Hextend does not inhibit platelet function as anticipated by its high mol. weight and degree of substitution. The unexpected platelet stimulating effect of Hextend is unique among the currently available HES prepns. and may, at least in part, be induced by its solvent containing calcium chloride dihydrate (2.5 mmol/L). The platelet-inhibiting effect of 6%Hetastarch-Baxter was not significantly different from that of medium mol. weight HES 200.
AN 2004:679330 HCAPLUS <<LOGINID::20101007>>
DN 142:245773
TI The Effects of High Molecular Weight Hydroxyethyl Starch Solutions on Platelets
AU Deusch, Engelbert; Thaler, Ulrich; Kozek-Langenecker, Sibylle A.
CS Department of Anesthesiology and Intensive Care, Vienna Medical University, Austria
SO Anesthesia & Analgesia (Hagerstown, MD, United States) (2004), 99(3), 665-668
CODEN: AACRAT; ISSN: 0003-2999
PB Lippincott Williams & Wilkins
DT Journal
LA English
OSC.G 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 10 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Blood plasma substitutes containing hydroxyethyl starch with good pH stability, and plastic bags filled with them

AB Blood plasma substitutes contain hydroxyethyl starch (HES) (Mw 150,000-300,000), Na+ and Cl- as the only electrolytes, and citrate ion as a pH-adjusting agent. A solution (pH 6.5) containing HES (30 g), NaCl (4.5 g), an aqueous 1% Na citrate solution (1.53 mL), and H2O to 100 mL showed pH 5.92 after 30-day storage at 40° after sterilization at 115° for 15 min in a polypropylene bag.
AN 2004:429918 HCAPLUS <<LOGINID::20101007>>
DN 140:412290
TI Blood plasma substitutes containing hydroxyethyl starch with good pH stability, and plastic bags filled with them
IN Tono, Hiroshi; Fujino, Keiichi; Toyama, Toshihiro
PA Nihon Pharmaceutical Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2004149450	A	20040527	JP 2002-315846	20021030 <--
PRAI JP 2002-315846		20021030 <--		

L13 ANSWER 11 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Highly-branched, low substituted starch products for use as plasma expanders
AB The invention concerns modified hydroxyethyl and hydroxypropyl starches for clin. use as plasma expanders that have a branching degree of 8-20 mol%, a substitution degree (MS) of 0.05-0.3 and mol. weight of 10,000-450,000. The products are used in peritoneal dialysis. According to expts. with rats, the products deplete faster from liver, spleen, lung and kidney than conventional starch products.
AN 2004:198158 HCAPLUS <<LOGINID::20101007>>
DN 140:223241
TI Highly-branched, low substituted starch products for use as plasma expanders
IN Henning, Klaus
PA Fresenius Kabi Deutschland G.m.b.H., Germany
SO Ger. Offen., 5 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 10237442	A1	20040311	DE 2002-10237442	20020816 <--
DE 10237442	B4	20040819		
WO 2004022602	A1	20040318	WO 2003-EP8411	20030730 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003251668	A1	20040329	AU 2003-251668	20030730 <--
EP 1530593	A1	20050518	EP 2003-793660	20030730 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

CN 1675248	A	20050928	CN 2003-819356	20030730	<--
CN 100340578	C	20071003			
JP 2005539107	T	20051222	JP 2004-533291	20030730	<--
US 20060032400	A1	20060216	US 2005-524424	20050722	<--
US 7550446	B2	20090623			
HK 1080872	A1	20080627	HK 2006-100567	20060113	<--
JP 2010209349	A	20100924	JP 2010-117591	20100521	<--
PRAI DE 2002-10237442	A	20020816	<--		
JP 2004-533291	A3	20030730	<--		
WO 2003-EP8411	W	20030730	<--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 12 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Volume efficacy and reduced influence on measures of coagulation using hydroxyethyl starch 130/0.4 (6%) with an optimised in vivo molecular weight in orthopaedic surgery: a randomised, double-blind study
AB Background and objective: Different types of hydroxyethyl starch (HES) affect blood coagulation differently. The authors studied the effects of HES 130/0.4 on coagulation in major orthopedic surgery in relation to the pharmacol. parameter in vivo mol. weight Methods: 52 patients were randomly allocated to either HES 130/0.4 (6%, mean mol. weight 130 kDa, molar substitution 0.4) or HES 200/0.5 (6%, control) in a double-blind fashion. Colloidal volume requirements for intra- and postoperative hemodynamic stabilization were compared. Safety analyses of this pharmacol. study included a comparison of coagulation factor tests, in vivo mol. weight, and HES plasma concns. Results: The colloidal vols. given were similar at the end of surgery (1602±569 for HES 130/0.4 vs. 1635±567 mL for HES 200/0.5), 5 h later (1958 ±,467 vs. 1962±398 mL), and up to the first postoperative day (2035±446 vs. 2000±424 mL). HES in vivo mol. weight at the end of surgery was 88,707±13 938 vs. 158,374±33 933 Da ($p < 0.001$) and 5 h later was 86,663±16 126 vs. 136,299±26 208 Da ($p < 0.001$). In parallel to the lower in vivo mol. weight, factor VIII and von Willebrand factor returned to almost normal in the HES 130/0.4 group up to 5 h postoperatively, but not in the control group ($p < 0.05$) Residual HES plasma concns. after 24 h were low in the HES 130/0.4 group (1.0 mg/mL), but higher in the control group (2.6 mg/mL). Conclusion: HES 130/0.4 and HES 200/0.5 were found to be similar with regard to volume efficacy. Sensitive coagulation parameters returned more rapidly to normal in the HES 130/0.4 group. Lower in vivo mol. weight and more rapid excretion of HES 130/0.4 are the likely explanations for the smaller influence on coagulation in this group.
AN 2004:179543 HCAPLUS <<LOGINID::20101007>>
DN 140:228979
TI Volume efficacy and reduced influence on measures of coagulation using hydroxyethyl starch 130/0.4 (6%) with an optimised in vivo molecular weight in orthopaedic surgery: a randomised, double-blind study
AU Jungheinrich, Cornelius; Sauermann, Wilhelm; Bepperling, Frank; Vogt, Norbert H.
CS Clinical Research, Fresenius Kabi, Bad Homburg, Germany
SO Drugs in R&D (2004), 5(1), 1-9
CODEN: DRDDFD; ISSN: 1174-5886
PB Adis International Ltd.
DT Journal
LA English

OSC.G 23 THERE ARE 23 CAPLUS RECORDS THAT CITE THIS RECORD (23 CITINGS)
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 13 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Binding of hydroxyethyl starch molecules to the platelet surface
AB Hydroxyethyl starch (HES) solns. impair platelet function by reducing the availability of the fibrinogen receptor. This effect is not mediated by intracellular signal transduction pathways. Also, an unspecific coating of platelets by HES macromols. may be responsible for its antiplatelet effects. To test this hypothesis, the authors investigated the binding of fluorochrome-coupled HES to the surface of human platelets using whole blood flow cytometry. Citrated whole blood from 8 volunteers was incubated (5 min, 22°C, in the dark) with fluorescein isothiocyanate (FITC)-coupled HES (200-kDa mol. weight, 0.5 degree of substitution, 0.042 molar ratio of FITC-conjugation) resulting in 0, 1, 3, 5, 10, 20, and 40% hemodilution. The percentage of platelets binding FITC-HES was determined using a FACSCalibur flow cytometer and CellQuestPro software. The percentage of FITC-pos. platelets increased in a concentration-dependent manner reaching statistical significance at 10% hemodilution. Binding was independent of fibrinogen receptor blockade. The present expts. clearly demonstrate that extracellular binding of HES to the platelet surface is, at least in part, responsible for the antiplatelet effects of HES by blocking the access of ligands to the platelet fibrinogen receptor.
AN 2003:759942 HCAPLUS <<LOGINID::20101007>>
DN 140:139068
TI Binding of hydroxyethyl starch molecules to the platelet surface
AU Deusch, Engelbert; Gamsjager, Thomas; Kress, Hans-Georg; Kozek-Langenecker, Sibylle A.
CS Department of Anesthesiology and Intensive Care (B), School of Medicine, University of Vienna, Vienna, Austria
SO Anesthesia & Analgesia (Hagerstown, MD, United States) (2003), 97(3), 680-683
CODEN: AACRAT; ISSN: 0003-2999
PB Lippincott Williams & Wilkins
DT Journal
LA English
OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 14 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Influence of long-term volume therapy with hydroxyethyl starch on leukocytes in patients with acute stroke
AB A repeated administration of hydroxyethyl starch affects hemostasiol. and rheol. factors such as the concentration of factor VIII/von Willebrand factor, platelet volume and plasma viscosity. An earlier study showed that HES also lowers the concentration of fibronectin, a mol. important in the reticulo-endothelial system (RES). RES has a "clearing function" and is a part of the non-immune-specific defense mechanisms of the body. It is involved in the elimination of HES from the blood. Since leukocytes are another important part of the unspecific defense system, the goal of the present study was to investigate whether HES affects leukocytes. After giving their informed consent, 20 patients with cerebral perfusion disorders were randomized and underwent a double-blind 10-day hypervolemic hemodilution with HES 200/0.5/13 or HES 70/0.5/4. The nos. of leukocytes, percentage of lymphocytes, percentage of neutrophilic granulocytes and Hb concentration were measured. The absolute number of leukocytes did not change significantly, but the share of neutrophilic granulocytes increased. The increase in neutrophilic granulocytes reflects an increase in phagocytic

activity. HES 200/0.5/13, which has the larger in vivo mol. weight (MW = 95 kD), caused a larger increase in neutrophilic granulocytes than HES 70/0.5/4, which has an in vivo MW of 58 kD.
AN 2003:549860 HCAPLUS <<LOGINID::20101007>>
DN 139:224104
TI Influence of long-term volume therapy with hydroxyethyl starch on leukocytes in patients with acute stroke
AU Woessner, Ralph; Grauer, Markus T.; Dieterich, Hans-Juergen; Treib, Wolfgang; Stoll, Martin; Treib, Johannes
CS Neurologische Klinik, Westpfalz-Klinikum GmbH, Kaiserslautern, Germany
SO Arzneimittel-Forschung (2003), 53(6), 402-406
CODEN: ARZNAD; ISSN: 0004-4172
PB Editio Cantor Verlag
DT Journal
LA English
OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 15 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The effects of hydroxyethyl starch solutions on thromboelastography in preoperative male patients
AB Hydroxyethyl starches (HES) have been shown to decrease clot strength and to increase coagulation times assessed by thromboelastog. (TEG). HES with minimal anticoagulant side-effects is beneficial for plasma volume expansion in the perioperative setting. A comparison of the in vivo effects of high, middle and low mol. weight HES solns. on TEG variables has not been performed so far. Blood was obtained before and after i.v. infusion (10 mL kg-1) of either saline, HES 70/0.5/4 (mol. weight in kDa/degree of substitution/C2:C6 ratio), HES 130/0.4/9, HES 200/0.6/9.4, or HES 450/0.7/4.6 in 50 otherwise healthy patients. Thromboelastog. was performed in 360 μl of 1% celite activated citrated whole blood after recalcification. HES 450/0.7/4.6 prolonged reaction time indicating impairment of the plasmatic coagulation system. TEG parameters indicative for platelet function, including angle α, maximum amplitude and coagulation time, deteriorated after infusion of HES 450/0.7/4.6 and HES 70/0.5/4. HES 200/0.6/9.4 and HES 130/0.4/9 impaired platelet contribution to hemostasis only partially, decreasing two or one TEG platelet parameters, resp. Infusion of HES 450/0.7/4.6 compromises TEG parameters more than the other solns. tested, whereas HES 130/0.4/9 has the smallest effect. Further outcome-related studies are needed to assess the clin. relevance of our findings.
AN 2003:137114 HCAPLUS <<LOGINID::20101007>>
DN 138:297342
TI The effects of hydroxyethyl starch solutions on thromboelastography in preoperative male patients
AU Felfernig, M.; Franz, A.; Braunlich, P.; Fohringer, C.; Kozek-Langenecker, S. A.
CS Department of Anesthesiology and Intensive Care B, School of Medicine, University of Vienna, Vienna, Austria
SO Acta Anaesthesiologica Scandinavica (2003), 47(1), 70-73
CODEN: AANEAB; ISSN: 0001-5172
PB Blackwell Munksgaard
DT Journal
LA English
OSC.G 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS RECORD (13 CITINGS)
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 16 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Hydroxyethyl starch does not cross the blood-brain or the placental

barrier but the perineurium of peripheral nerves in infused animals

AB Therapy with hydroxyethyl starch (HES) is associated with a high incidence of persistent pruritus due to HES storage in cutaneous nerves. Up to now it has been unknown if HES also accumulates in the extra-cutaneous peripheral or central nervous system. To study this, five rats including one pregnant one were infused with a single dose (34-150 mg) of HES (70/200/450 kDa mol. weight) conjugated with fluorescein isothiocyanate (FITC). In addition, four sheep were infused with a cumulative dosage of 30 g, 120 g, and 420 g HES (200 kDa), resp. After 7-13 days, biopsies from the adult rats, four fetal rats and sheep were taken from various organs. The specimens were analyzed by light, electron, and confocal laser scanning microscopy. Typical HES storage vacuoles were found in macrophages of the skin, liver, spleen, lung, and kidney. HES storage in healthy animals was not associated with signs of either inflammation or apoptosis contrary to a previously described animal hemorrhagic shock model. Beyond that, fetus biopsies did not show any storage phenomenon, confirming that HES does not cross the placental barrier. Deposits of HES could be detected in Schwann cells of cutaneous nerve fibers as well as in perineural and endoneural cells of sciatic nerve in one rat (HES 450 kDa) and three of four sheep. No HES storage was found in the central nervous system. Our findings clearly demonstrate that storage of HES is detectable only in small peripheral nerves, suggesting a cutaneous origin of the HES-induced pruritus.

AN 2003:86491 HCAPLUS <<LOGINID::20101007>>

DN 139:143288

TI Hydroxyethyl starch does not cross the blood-brain or the placental barrier but the perineurium of peripheral nerves in infused animals

AU Stander, S.; Bone, H. G.; Machens, H. G.; Aberle, T.; Burchard, W.; Prien, T.; Luger, T. A.; Metze, D.

CS Department of Dermatology, University of Munster, Munster, 48149, Germany

SO Cell & Tissue Research (2002), 310(3), 279-287
CODEN: CTSRCS; ISSN: 0302-766X

PB Springer-Verlag

DT Journal

LA English

OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 17 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Hydroxyethylstarch as a risk factor for acute renal failure: is a change of clinical practice indicated?

AB A review. Hypovolemia is extremely common among surgical and intensive care patients. The best strategy for volume replacement therapy has been the focus of debate for several years. The lack of acceptance of hydroxyethylstarch (HES) for volume replacement therapy is most likely due to reports of abnormal coagulation and to recently published studies indicating neg. effects of HES on renal function. All HES solns. are not created equal - they widely differ with regard to their physicochem. characteristics (concentration, mean mol. weight (Mw), degree of substitution [DS], C2/C6-substitution ratio). These differences have important consequences for adverse effects such as alterations in the coagulation process and on kidney function. Conflicting results about the effects of different HES solns. on renal function may also be due to varying clin. protocols, selection of patients, and different criteria for volume replacement. Theor. and documented hazards are associated with each kind of volume replacement therapy. There appears to be no reason to banish modern HES prepns. with a low or medium Mw (e.g. 70, 130 or 200kD) and a low DS (0.4 or 0.5) in patients without pre-existing kidney dysfunction. In patients with known renal dysfunction (e.g. plasma creatinine level >3 mg/dL), all HES prepns. should be used

cautiously and other volume replacement regimens (e.g. gelatins) should be considered since no convincing data are yet available for the latest generation of HES (Mw 130; DS 0.4).
AN 2002:856392 HCAPLUS <<LOGINID::20101007>>
DN 137:345468
TI Hydroxyethylstarch as a risk factor for acute renal failure: is a change of clinical practice indicated?
AU Boldt, Joachim
CS Department of Anaesthesiology and Intensive Care Medicine, Klinikum der Stadt Ludwigshafen, Ludwigshafen, Germany
SO Drug Safety (2002), 25(12), 837-846
CODEN: DRSAEA; ISSN: 0114-5916
PB Adis International Ltd.
DT Journal; General Review
LA English
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 18 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effect of plasma for volume replacement in induced hypovolemic shock. A comparative study of low and medium molecular weight hydroxyethyl starch substitutes
AB We studied the relative efficacy of two plasma substitute therapies in a canine model for hemorrhagic shock. Anesthetized dogs were bled to maintain a mean arterial pressure (mAP) at 50 mmHg and then administered a single bolus injection of 6% hydroxyethyl starch (HES) with a mol. weight of 70 kDa (HES70 group) or 200 kDa (HES200 group) at a volume equivalent to the blood withdrawn. The efficacy of both therapies in maintaining the hemodynamic variables, the plasma colloidal and crystalloidal osmotic pressure (Pcop and Posm), and the circulating blood volume (CBV) were investigated. CBV was measured by the pulse-dye densitometry (PDD) method. After resuscitation, hemodynamic variables were better maintained in the HES200 group than in the HES70 group. Particularly, mAP, mean pulmonary arterial pressure, pulmonary arterial wedge pressure, cardiac index, left ventricular stroke work index, and maximum rate of left ventricular pressure change, were maintained at a satisfactorily stable level in the HES200 group as compared with the HES70 group. Moreover, Pcop and CBV in the HES200 group were significantly greater than those in the HES70 group. On the other hand, Posm did not differ between the two groups. HES200 may be a more effective volume replacement therapy than HES70 for induced hemorrhagic shock because of improvement and maintenance of hemodynamic variables, CBV and Pcop.
AN 2002:791203 HCAPLUS <<LOGINID::20101007>>
DN 137:315846
TI Effect of plasma for volume replacement in induced hypovolemic shock. A comparative study of low and medium molecular weight hydroxyethyl starch substitutes
AU Maruta, Kyoko
CS Dep. Anesthesiol., Sch. Med. Showa Univ., Japan
SO Showa Igakkai Zasshi (2002), 62(3), 188-193
CODEN: SIGZAL; ISSN: 0037-4342
PB Showa Daigaku, Showa Igakkai
DT Journal
LA Japanese

L13 ANSWER 19 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Pharmacodynamics and tolerability of acetyl starch as a new plasma volume expander in patients undergoing elective surgery
AB Acetyl starch (ACS) is a new synthetic colloid solution for plasma

volume expansion and is now undergoing phase II clin. trials. We compared the pharmacodynamics and tolerability of ACS with those of hydroxyethyl starch (HES) in 32 patients (American Society of Anesthesiologists phys. status I and II) undergoing elective surgery. In this prospective, randomized, double-blind trial patients received either 15 mL/kg ACS 6% (average mol. weight (Mw) 200,000/ molar substitution (MS) 0.5) or HES 6% (Mw 200,000/ MS 0.5) i.v. up to a maximum dose of 1000 mL. Hemodynamic parameters, rheol. parameters, volume effect, acid-base status as well as effects on hemostasis were studied. After infusion of ACS and HES there was a similar increase in central venous pressure and mean arterial pressure in both groups. Acid-base status was not significantly altered after the end of the colloid infusions. After ACS infusion, plasma acetate concentration increased from 0.13±0.16 mg/dL to 2.87±1.13 mg/dL, however, after 24 h there was no significant difference in plasma acetate concentration compared to HES. The volume effect ranged from 104-116% (ACS) and from 88-118% (HES) of the colloid dose administered. These differences were not statistically significant. Partial thromboplastin time (aPTT) was only slightly increased after ACS infusion (from 38.6±5.7 s to 41.4±5.1 s), but was significantly increased after HES infusion (from 38.7±5.7 s to 46.1±7.0 s). ACS and HES are equally effective plasma volume expanders; ACS might be a new, alternative colloid solution with fewer coagulation side-effects than HES.

AN 2002:88807 HCAPLUS <<LOGINID::20101007>>
DN 136:272953
TI Pharmacodynamics and tolerability of acetyl starch as a new plasma volume expander in patients undergoing elective surgery
AU Bremerich, D. H.; Lischke, V.; Asskali, F.; Forster, H.; Behne, M.
CS Department of Anesthesiology and Resuscitation, Johann-Wolfgang-Goethe-Universitatsklinikum, Frankfurt, Germany
SO International Journal of Clinical Pharmacology and Therapeutics (2000), 38(8), 408-414
CODEN: ICTHEK; ISSN: 0946-1965
PB Dustri-Verlag Dr. Karl Feistle
DT Journal
LA English
OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)
RE.CNT 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 20 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of resuscitation with hydroxyethyl starch (HES) on pulmonary hemodynamics and lung lymph balance in hemorrhagic sheep; comparative study of low- and high-molecular-weight HES
AB Studies of extremely low- and high-mol.-weight HES were performed to evaluate the effects of these solns. on lung lymph filtration during resuscitation. Conscious sheep were bled from an arterial line to maintain shock. After 2 h of hemorrhage, the following solns. were infused for 1 h: low-mol.-weight HES (mol. weight 70,000, substitution fractions 0.5-0.55); high-mol.-weight HES (mol. weight 450,000, substitution fractions 0.65); normal saline. The amount of solution infused was the same as the volume of blood lost. Both low- and high-mol.-weight HES equally restored systemic arterial pressure and cardiac output and increased pulmonary microvascular pressure. However, the actual oncotic pressure gradient (plasma/lymph) rose transiently during infusion of low-mol.-weight HES, while high-mol.-weight HES increased the oncotic pressure gradient even after cessation of the infusion. Lung lymph flow during and after resuscitation with low-mol.-weight HES and saline rose significantly from the preshock value. There was no significant difference between low-mol.-weight HES and saline with respect to effects on lung lymph flow. However, lung lymph flow after high-mol.-weight HES was

less than that after low-mol.-weight HES. These data suggest that low-mol.-weight HES is as useful as a plasma substitute as high-mol.-weight HES but has the possibility of increasing lung lymph filtration during the early phase of resuscitation.

AN 2002:41206 HCAPLUS <<LOGINID::20101007>>

DN 137:195249

TI Effects of resuscitation with hydroxyethyl starch (HES) on pulmonary hemodynamics and lung lymph balance in hemorrhagic sheep; comparative study of low- and high-molecular-weight HES

AU Kaneki, Toshimichi; Koizumi, Tomonobu; Yamamoto, Hiroshi; Fujimoto, Keisaku; Kubo, Keishi; Shibamoto, Toshishige

CS First Department of Internal Medicine, Shinshu University School of Medicine, Shinshu, 390-8621, Japan

SO Resuscitation (2002), 52(1), 101-108
CODEN: RSUSBS; ISSN: 0300-9572

PB Elsevier Science Ireland Ltd.

DT Journal

LA English

OSC.G 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 21 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Effects of colloidal resuscitation fluids on the neutrophil respiratory burst

AB Exptl. studies have revealed that gelatin and HES produce increased neutrophil respiratory burst activity. It was investigated whether 3-percent gelatin (MW 35,000) and three types of 6-percent HES (MW 70,000; degree of substitution, 0.5; 200,000/0.5; 450,000/0.7) prepns. can influence superoxide anion production during respiratory burst under clin. conditions. Blood samples were obtained from 40 patients before and 1 h after the infusion, before anesthesia and surgical treatment. After stimulation with bacteria (Escherichia coli), the respiratory burst was measured by oxidation of non-fluorescent dihydrorhodamine 123 to the fluorescent rhodamine 123 by the use of flow cytometry. Respiratory burst activity decreased significantly ($p = 0.004$) from the baseline (60.0 ± 6.5%) to 1 h after the administration of the low-mol.-weight HES preparation (55.0 ± 6.8%). No significant differences in respiratory burst activity could be found after the administration of gelatin or medium-mol.-weight or high-mol.-weight HES solution Thus, the administration of gelatin and medium- and high-mol.-weight HES prepns. did not influence respiratory burst activity under clin. conditions. However, the neutrophil respiratory burst was impaired after the administration of low-mol.-weight HES. Neutrophil respiratory burst activity may vary according to the type of colloidal plasma substitutes administered.

AN 2001:648196 HCAPLUS <<LOGINID::20101007>>

DN 136:334969

TI Effects of colloidal resuscitation fluids on the neutrophil respiratory burst

AU Jaeger, Karsten; Heine, Joern; Ruschulte, Heiner; Juttner, Bjorn; Scheinichen, Dirk; Kuse, Ernst R.; Piepenbrock, Siegfried

CS Departments of Anesthesiology and Intensive Care Medicine and of Abdominal and Transplantation Surgery, Hannover Medical School, Hannover, D-30625, Germany

SO Transfusion (Bethesda, MD, United States) (2001), 41(8), 1064-1068
CODEN: TRANAT; ISSN: 0041-1132

PB American Association of Blood Banks

DT Journal

LA English

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 22 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of hydroxyethylstarch and gelatin on renal function in severe sepsis: a multicenter randomized study
AB Hydroxyethylstarch used for volume restoration in brain-dead kidney donors has been associated with impaired kidney function in the transplant recipients. We undertook a multicenter randomized study to assess the frequency of acute renal failure (ARF) in patients with severe sepsis or septic shock treated with hydroxyethylstarch or gelatin. Adults with severe sepsis or septic shock were enrolled prospectively in three intensive-care units in France. They were randomly assigned 6% hydroxyethylstarch (200 kDa, 0·60-0·66 substitution) or 3% fluid-modified gelatin. The primary endpoint was ARF (a two-fold increase in serum creatinine from baseline or need for renal replacement therapy). Analyses were by intention to treat. Severity of illness and serum creatinine (median 143 [IQR 88-203] vs. 114 [91-175] μmol/L) were similar at baseline in the hydroxyethylstarch and gelatin groups. The frequencies of ARF (27/65 [42%] vs. 15/64 [23%], p=0·028) and oliguria (35/62 [56%] vs. 23/63 [37%], p=0·025) and the peak serum creatinine concentration (225 [130-339] vs. 169 [106-273] μmol/L, p=0·04) were significantly higher in the hydroxyethylstarch group than in the gelatin group. In a multivariate anal., risk factors for acute renal failure included mech. ventilation (odds ratio 4·02 [95% CI 1·37-11·8], p=0·013) and use of hydroxyethylstarch (2·57 [1·13-5·83], p=0·026). The use of this preparation of hydroxyethylstarch as a plasma-volume expander is an independent risk factor for ARF in patients with severe sepsis or septic shock.
AN 2001:221381 HCAPLUS <<LOGINID::20101007>>
DN 135:220973
TI Effects of hydroxyethylstarch and gelatin on renal function in severe sepsis: a multicenter randomized study
AU Schortgen, F.; Lacherade, J.-C.; Bruneel, F.; Cattaneo, I.; Hemery, F.; Lemaire, F.; Brochard, L.
CS Medical Intensive-Care Unit, Hopital Henri Mondor, Assistance Publique-Hopitaux de Paris, University Paris 12, Creteil, 94000, Fr.
SO Lancet (2001), 357(9260), 911-916
CODEN: LANCAO; ISSN: 0140-6736
PB Lancet Ltd.
DT Journal
LA English
OSC.G 58 THERE ARE 58 CAPLUS RECORDS THAT CITE THIS RECORD (58 CITINGS)
RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 23 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The influence of intravascular volume therapy with a new hydroxyethyl starch preparation (6% HES 130/0.4) on coagulation in patients undergoing major abdominal surgery
AB A new hydroxyethyl starch (HES) preparation with a mean mol. weight of 130,000 Da and a degree of substitution of 0.4 shows favorable pharmacokinetic properties. We conducted a study of the influence of the new HES specification on coagulation and compared it with another colloidal intravascular volume replacement regimen using gelatin. According to a prospective, random sequence, 42 patients undergoing major abdominal surgery received either HES 130/0.4 (n = 21) or gelatin (n = 21) until the first postoperative day (POD) to keep central venous pressure between 10 and 14 mm Hg. From arterial blood samples, standard coagulation

variables were measured, and modified thromboelastogram (TEG) measurements using different activators were performed. A total of 2830±350 mL of gelatin and 2430±310 mL of HES 130/0.4 were administered until the morning of the first POD. The use of allogeneic blood/blood products and standard coagulation variables did not differ significantly between the two groups. After induction of anesthesia, all TEG data for both groups were within normal range. Coagulation time and maximum clot firmness did not change significantly in any TEG measurements during the study period. The kinetics of clot formation (clot formation time) significantly increased immediately after surgery, but without showing significant group differences. On the morning of the first POD, the clot formation time returned to almost normal levels, except for aprotinin-activated TEG. We conclude that administration of moderate doses of the new HES 130/0.4 preparation in patients undergoing major abdominal surgery results in similar coagulation alterations as those after using an established gelatin-based volume-replacement regimen.

AN 2001:219315 HCAPLUS <<LOGINID::20101007>>

DN 135:174970

TI The influence of intravascular volume therapy with a new hydroxyethyl starch preparation (6% HES 130/0.4) on coagulation in patients undergoing major abdominal surgery

AU Haisch, Gerd; Boldt, Joachim; Krebs, Claudia; Kumle, Bernhard; Suttner, Stefan; Schulz, Andreas

CS Department of Anesthesiology and Intensive Care Medicine, Klinikum der Stadt Ludwigshafen, Ludwigshafen, D-67063, Germany

SO Anesthesia & Analgesia (Baltimore, MD, United States) (2001), 92(3), 565-571
CODEN: AACRAT; ISSN: 0003-2999

PB Lippincott Williams & Wilkins

DT Journal

LA English

OSC.G 35 THERE ARE 35 CAPLUS RECORDS THAT CITE THIS RECORD (35 CITINGS)

RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 24 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Influence of colloid fluids on polymorphonuclear granulocyte function in vivo

AB Granulocytes have a role in the immediate immune response. In a previous investigation the authors could demonstrate in vitro a moderate increase of the complement receptors CR1 (CD35) and CR3 (CD11b/CD18) on the surface of polymorphonuclear neutrophils (PMN) after incubation of whole blood with colloids. To elucidate the clin. significance, the authors investigated if these changes were also present in vivo. The study was performed prior to anesthesia for orthopedic surgery. A total of 60 ASA-I patients was evaluated. Patients received in a randomized manner 7 mL/kg of the following solns.: human albumin 5% (HA), gelatine 4% (GEL), hydroxyethylstarch solution 6% with MW 200 000 Da, degree of substitution 0.5 (HES), or Ringer's solution Prior to the infusion, at the end (30 min) and again 30 min later, blood samples were taken. Blood was incubated with fluorescein-conjugated monoclonal antibodies (CD11b, CD16, CD35, CD62L) and analyzed with flow cytometry. HA, GEL, HES, and Ringer's solution failed to induce significant differences in the expression of complement receptors CR1 (CD35) and CR3 (CD11b/CD18), Fcγ receptor IIIb (CD16), and of L-selectin (CD62L) receptor on the surface of PMN. Application of colloids like HA, GEL, or HES in moderate amts. shows no short-term effect on adhesion or activation mols. on granulocytes. However, in high doses, infused in situations such as multiple trauma and sepsis, the consequences on the function of PMN may be speculative and require further investigations.

AN 2001:212429 HCAPLUS <<LOGINID::20101007>>

DN 135:200293
TI Influence of colloid fluids on polymorphonuclear granulocyte function in vivo
AU Engel, J. M.; Welters, I.; Rupp, M.; Langefeld, T.; Ruwoldt, R.; Menges, T.; Hempelmann, G.
CS Department of Anaesthesiology and Intensive Care Medicine, Justus-Liebig-University, Giessen, Germany
SO Acta Anaesthesiologica Scandinavica (2001), 45(3), 385-389
CODEN: AANEAB; ISSN: 0001-5172
PB Munksgaard International Publishers Ltd.
DT Journal
LA English
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 25 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Low- and medium-molecular-weight hydroxyethyl starches: Comparison of their effect on blood coagulation
AB High-mol.-weight hydroxyethyl starch (HES) compromises blood coagulation more than medium-mol.-weight HES. The authors compared medium mol. weight HES (200 kd [HES200]) and low-mol.-weight HES (70 kd [HES70]). In a prospective, double-blind, randomized-sequence crossover study, 22 male volunteers received 15 mL/kg HES200 and HES70. Blood samples were taken before and 5 min, 30 min, 1 h, 2 h, 4 h, 8 h, and 24 h after infusion. The following parameters were analyzed at all time points: prothrombin time, activated partial thromboplastin time, fibrinogen, factor VIII, antigenetic and functional von Willebrand factor, platelets, Thrombelastograph anal. parameters (reaction time, coagulation time, maximum amplitude, angle α, and clot lysis 30 and 60 min after maximum amplitude), ionized Ca, hematocrit, HES blood plasma concentration, mol. weight (weight average and number average), molar substitution, and polydispersity (weight average/number average).
Repeated-measures anal. of variance was used to compare the response of the aforementioned parameters to the infusion of HES70 and HES200. Both HES solns. had an impact on all parameters. A slightly greater compromise with HES200 was found in activated partial thromboplastin time, factor VIII, antigenetic von Willebrand factor, functional von Willebrand factor, maximum amplitude, and angle α. No difference was established with the other parameters. HES concentration, weight average, number average, and polydispersity were higher with HES200. There was no difference with molar substitution. Low-mol.-weight hydroxyethyl starch (70 kd) compromises blood coagulation slightly less than HES200, but it is unclear whether this is clin. relevant.
AN 2000:850186 HCAPLUS <<LOGINID::20101007>>
DN 135:302
TI Low- and medium-molecular-weight hydroxyethyl starches: Comparison of their effect on blood coagulation
AU Jamnicki, Marina; Bombeli, Thomas; Seifert, Burkhardt; Zollinger, Andreas; Camenzind, Vladimir; Pasch, Thomas; Spahn, Donat R.
CS Institute of Anesthesiology, University Hospital, Zurich, CH-8091, Switz.
SO Anesthesiology (2000), 93(5), 1231-1237
CODEN: ANESAV; ISSN: 0003-3022
PB Lippincott Williams & Wilkins
DT Journal
LA English
OSC.G 31 THERE ARE 31 CAPLUS RECORDS THAT CITE THIS RECORD (31 CITINGS)
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 26 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Plasma substituents for volume replacement in hemorrhagic shock: comparison of low and medium molecular weight hydroxyethyl starch
AB The aim of this study was to assess the relative efficacy of 2 volume replacement therapies in a canine model of induced hemorrhagic shock. Anesthetized dogs were bled to maintain mean arterial pressure (mAP) at 50 mm Hg for 30 min and then administered a single bolus injection of 6% hydroxyethyl starch (HES) with a mol. weight of 70 kd (HES70 group) or 200 kd (HES200 group) at a volume equivalent to the blood withdrawn. The authors examined the efficacy of both therapies in maintaining hemodynamic variables and splanchnic organ blood flow (ie, blood flow through the renal cortex, renal medulla, liver, and pancreas). After resuscitation, hemodynamic variables were better maintained in the HES200 group than in the HES70 group. In particular, HES200 better preserved mAP, cardiac index, mean pulmonary arterial pressure, pulmonary arterial wedge pressure, left ventricular stroke work index, and maximum rate of left ventricular pressure change. In both groups splanchnic organ blood flows decreased after hemorrhagic shock but increased after volume replacement resuscitation. After resuscitation splanchnic organ blood flow was greater in the HES200 group than in the HES70 group. The results of this study suggest that HES200 is more effective than HES70 as volume replacement therapy in a canine model of hemorrhagic shock, as measured by improvements in hemodynamic variables and splanchnic organ blood flow.
AN 2000:598288 HCAPLUS <<LOGINID::20101007>>
DN 134:65969
TI Plasma substituents for volume replacement in hemorrhagic shock: comparison of low and medium molecular weight hydroxyethyl starch
AU Kobori, Masao; Negishi, Hideru; Nagai, Hiroe; Iyama, Kyoko
CS Department of Anesthesiology, Showa University School of Medicine, Tokyo, 142-8666, Japan
SO Current Therapeutic Research (2000), 61(7), 414-421
CODEN: CTCEA9; ISSN: 0011-393X
PB Excerpta Medica, Inc.
DT Journal
LA English
RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 27 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI First human studies with a high-molecular-weight iron chelator
AB The release of free, reactive iron from cellular iron stores has been implicated as an important contributor to tissue damage in a variety of clin. situations, including ischemia and reperfusion injury, hemorrhagic shock, and burn injury. Deferoxamine mesylate (DFO), the only iron chelator currently approved for clin. use, is used for the treatment of iron overload, including acute iron poisoning and treatment of chronic iron overload in transfusion-dependent anemias such as β-thalassemia. However, it is not suitable for acute care situations because of its toxicity, primarily hypotension when given at high i.v. doses, and its short plasma half-life. We have produced a high-mol.-weight iron chelator by chemical coupling DFO to hydroxyethyl starch. This novel chelator (HES-DFO) was administered to healthy male subjects by i.v. infusion over a 4-h period. The drug was well tolerated, and signs of DFO acute toxicity were not observed Maximum plasma chelator levels of approx. 3 mmol/L were achieved with HES-DFO, which is more than an order of magnitude higher than has been reported with injections of DFO. Drug residence time in plasma was markedly prolonged, with an initial

half-life of 22 to 33 h. Urinary iron excretion was 7.1 ± 2.2 mg in 48 h in the highest dose group, as compared with 0.06 ± 0.15 mg in control subjects who received normal saline infusions. I.v. infusion of HES-DFO is well tolerated, produces substantial and prolonged plasma chelator levels, and markedly stimulates urinary iron excretion.

AN 2000:430799 HCAPLUS <<LOGINID::20101007>>

DN 133:37931

TI First human studies with a high-molecular-weight iron chelator

AU Dragsten, Paul R.; Hallaway, Philip E.; Hanson, Gregory J.; Berger, Arthur E.; Bernard, Bruce; Hedlund, Bo E.

CS Biomedical Frontiers Inc, Minneapolis, MN, 55414, USA

SO Journal of Laboratory and Clinical Medicine (2000), 135(1), 57-65
CODEN: JLCMAK; ISSN: 0022-2143

PB Mosby, Inc.

DT Journal

LA English

OSC.G 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (24 CITINGS)

RE.CNT 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 28 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI A study of plasma substitutes for volume replacement in intraoperative hemodilution technique ''estimation of circulating blood volume by pulse dye-densitometry

AB The purpose of this study was to exptl. compare the hemodynamic variables, plasma colloidal and crystalloid osmotic pressure (Pcop and Posm), and circulating blood volume (CBV), under normovolemic hemodilution in isoflurane-anesthetized dogs. We divided anesthetized dogs into two groups: a HES 70 group (hydroxyethyl starch, MW=70 kDa , 6% in saline), and a HES 200 groups (hydroxyethyl starch, MW =200 kDa, 6% in saline). Hemodilution was produced by exchanging blood (25mL/kg) with isovolemic artificial colloid of either HES 70 or HES 200. Measurements and sampling were taken before hemodilution, at the end of hemodilution, and 30, 60, 120, 180, 240, and 300 min after hemodilution. CBV was measured by pulse-dye densitometry (PDD) method. A significant increase in mean pulmonary arterial pressure (mPAP), cardiac index (CI), left ventricular stroke work index (LVSWI), and maximum rate of left ventricular pressure change (LV dp/dt maximum), and a significant decrease in systemic vascular resistance (SVR) values occurred after hemodilution in both groups. However, mAP, mPAP, pulmonary artery wedge pressure (PAWP) and LV dp/dt maximum values in group HES 70 decreased significantly over time compared with the pre-hemodilution condition. MPAP, CI, LVAWI and LV dp/dt maximum values in group HES 200 increased significantly. After hemodilution, CBV and Pcop increased significantly compared with the pre-hemodilution condition in both groups. In group HES 70, CBV and Pcop decreased from the pre-hemodilution condition over time, but not in group HES 200. Moreover, CBV and Pcop in group HES 200 significantly greater than those in group HES 70. Posm did not change significantly during any of the exptl. periods compared to the pre-hemodilution condition in both groups. These results suggest that HES 200 may be more effective than HES 70 for the normovolemic hemodilution. This is due to an improvement and a maintenance in hemodynamic variables, CBV and Pcop.

AN 2000:403485 HCAPLUS <<LOGINID::20101007>>

DN 133:256612

TI A study of plasma substitutes for volume replacement in intraoperative hemodilution technique ''estimation of circulating blood volume by pulse dye-densitometry

AU Nagai, Hiroe; Kobori, Masao

CS School of Medicine, Showa University, The purpose of this study was to experimentally compare the, Japan
SO Junkan Seigyo (2000), 21(1), 47-53
CODEN: JUSEE7; ISSN: 0389-1844
PB Nippon Junkan Seigyo Igakkai
DT Journal
LA English
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 29 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Randomized trial of hydroxyethyl starch versus gelatine for trauma resuscitation
AB Previous studies have demonstrated the rapid increase in systemic capillary permeability after blunt trauma and its association with poor outcome. There are theor. advantages in resuscitation with colloid fluids, which are well retained in the vascular compartment during times of capillary leak. The aim of this study was to compare the effects of post-trauma resuscitation with hydroxyethyl starch (HES) (mol. mass, 250 kDa) or gelatine (mol. mass, 30 kDa), the hypothesis being that HES would reduce capillary leak. Forty-five patients suffering blunt trauma were randomized on admission to receive either gelatine (Gelofusine) (n = 21) or HES (Pentaspan) (n = 24) for the first 24 h, after which the choice of fluid was at the discretion of the clinician. The mean Injury Severity Score for the HES and gelatine groups were 20.0 (range, 9-41) and 18.1 (range, 9-32), resp. (p = 0.43). Capillary permeability was assessed by urine albumin excretion rate for the first 24 h. For 5 days the daily mean PO2/FIO2 ratio, serum C-reactive protein, Hb, white cell and platelet counts, prothrombin, and activated partial thromboplastin time were recorded. Capillary permeability was lower in HES-treated patients during the first 24 h. Log mean (95% confidence interval) albumin excretion rate for gelatine and HES groups at 6 h were 117.5 (84.9) and 46.8 (24.3) μg/min (p = 0.011), at 12 h were 54.9 (30.0) and 17.2 (7.6) μg/min (p = 0.001), and at 24 h were 50.5 (23.4) and 23.6 (16.3) μg/min (p = 0.030), resp. The mean (95% confidence interval) PO2/FIO2 ratio for the HES and gelatine groups 48 h after admission were 324 (44) and 267 (43) mm Hg, resp. (p = 0.03). The mean (95% confidence interval) serum C-reactive protein in the HES and gelatine groups 24 h after admission were 72.4 (19.2) and 105.7 (30.1) mg/L, resp. (p = 0.03). There were no significant differences in any of the hematol. parameters during the first 48 h. The results suggest that compared with gelatine, resuscitation with HES reduces posttrauma capillary leak.
AN 2000:37173 HCAPLUS <<LOGINID::20101007>>
DN 132:102622
TI Randomized trial of hydroxyethyl starch versus gelatine for trauma resuscitation
AU Allison, Keith P.; Gosling, Peter; Jones, Sarah; Pallister, Ian; Porter, Keith M.
CS West Midlands Regional Training Scheme, Solihull, West Midlands, B911TA, UK
SO Journal of Trauma: Injury, Infection, and Critical Care (1999), 47(6), 1114-1121
CODEN: JOTRFA; ISSN: 1079-6061
PB Lippincott Williams & Wilkins
DT Journal
LA English
OSC.G 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)
RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 30 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Hydroxyethylstarch conjugates their production, and contrast agents containing them

AB Injected conjugates of hydroxyethylstarch with metal complexes remain confined to the intravascular space and are therefore useful as blood pool contrast agents in medical diagnosis. These agents accumulate in regions with high vascular permeability such as tumors, and can be used to demonstrate the degree of tissue perfusion, e.g. in diagnosis of myocardial infarction. They show high relaxivity in MRI, and have a carrying capacity for paramagnetic ions of .apprx.20%. They show good excretion behavior, good stability, and good biocompatibility (no data). Thus, hydroxyethylstarch (mol. weight 40 kDa) reacted with ClCH2CO2H in alkaline solution to form Na O-(carboxymethyl)hydroxyethylstarch (degree of substitution 1.1), which was amidated with the Gd complex of 10-(2-hydroxy-3-aminopropyl)-4,7,10-tris(carboxymethyl)-1,4,7,10-tetraazacyclododecane.

AN 1999:549187 HCAPLUS <<LOGINID::20101007>>

DN 131:185191

TI Hydroxyethylstarch conjugates their production, and contrast agents containing them

IN Mareski, Peter; Platzek, Johannes; Raduechel, Bernd; Niedballa, Ulrich; Weinmann, Hanns-Joachim

PA Schering Aktiengesellschaft, Germany

SO PCT Int. Appl., 34 pp.
CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9942139	A2	19990826	WO 1999-EP853	19990209 <--
	WO 9942139	A3	19990930		
	W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	DE 19808079	A1	19990826	DE 1998-19808079	19980220 <--
	AU 9928328	A	19990906	AU 1999-28328	19990209 <--
PRAI	DE 1998-19808079	A	19980220	<--	
	WO 1999-EP853	W	19990209	<--	

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 31 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN

TI Effects of hydroxyethyl starch infusion on lung fluid balance in hemorrhagic sheep

AB The present study was designed to investigate the effect of relatively low mol. hydroxyethyl starch (HES:Mw 70,000) on pulmonary hemodynamics and lymph flow balance during resuscitation from hemorrhagic hypotension employing instrumented and unanesthetized sheep with chronic lung lymph fistula. After baseline measurements for 2 h, animals were bled from a catheter placed in the artery to maintain systemic hypotension of 60-65 mmHg. After establishment of hemorrhagic hypotension, HES (HES group: n = 6) or normal saline (NS group: n = 5) was infused for one hour. The volume of infused solution was equal to the volume of shed blood in each animal. HES infusion restored systemic arterial pressure much more rapidly than NS. HES also produced significant increases in pulmonary arterial and left atrial pressures, and cardiac output. These parameters at the end of HES infusion were significantly higher than those with NS.

The actual oncotic pressure gradient (plasma-lymph) was transiently widened during HES infusion. Both HES and NS infusion produced an increase in lung lymph flow, but these increased levels did not show significant differences (4.8±1.6 mL/15 min with HES vs. 3.8±1.2 mL/15 min with NS). In conclusion, low mol. HES is a useful plasma substitute as it produced a transient beneficial effect on the oncotic gradient in pulmonary hemodynamics during the resuscitation from hemorrhage. HES solution also did not cause extravascular water retention that might induce respiratory disturbance at the early stage of resuscitation from hemorrhagic hypovolemia.

AN 1999:447446 HCAPLUS <<LOGINID::20101007>>
DN 131:134472
TI Effects of hydroxyethyl starch infusion on lung fluid balance in hemorrhagic sheep
AU Kaneki, Toshimichi
CS Sch. Med., Shinshu Univ., Matsumoto, 390-8621, Japan
SO Shinshu Igaku Zasshi (1999), 47(2), 119-128
CODEN: SIZAA7; ISSN: 0037-3826
PB Shinshu Igakkai
DT Journal
LA Japanese

L13 ANSWER 32 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Characterization of acetyl starch by means of NMR spectroscopy and SEC/MALLS in comparison with hydroxyethyl starch
AB The properties of starch derivs. which may be used as plasma substitutes, are dependent upon the mol. structure. Seven acetyl starch (AS) samples were determined and compared with results from hydroxyethyl starch (HES) samples. The molar masses and their distributions were determined with the combination of size exclusion chromatog. and light scattering. Slightly asym. distributions were determined with a polydispersity Mw /Mn .simeq. 2.4 and weight-average molar masses of Mw = 250,000-300,000 g/mol for 6 AS samples and Mw/Mn .simeq. 3.6 and a weight-average molar mass of 766,000 g/mol for one AS sample. The average degrees of substitution (DS) and the substitution pattern were determined by high resolution MNR spectroscopy. The AS samples investigated had a DS of 0.42-0.81, comparable to HES, but the regioselective substitution pattern revealed differences. While for HES the position C-2 is preferred and the position C-3 has nearly no substituent, for AS both positions, C-2 and C-3, are substituted likewise. Degradability by α-amylase was tested in the laboratory for As as well as for HES having nearly the same degree of substitution and molar mass, but C-2/C-6 = 2 for AS and C-2/C-6 = 1.4 for HES. An exponential decrease in the molar mass was observed over time, down to a limiting molar mass Mw .simeq. 50,000 g/mol for AS and Mw .simeq. 30,000 g/mol for HES, the degradation of AS occurred more slowly.

AN 1998:771673 HCAPLUS <<LOGINID::20101007>>
DN 130:29151
TI Characterization of acetyl starch by means of NMR spectroscopy and SEC/MALLS in comparison with hydroxyethyl starch
AU Heins, Dorothee; Kulicke, Werner-Michael; Kaeuper, Peter; Thielking, Heiko
CS Institut Technische Makromolekulare Chemie, Universitaet Hamburg, Hamburg, D-20146, Germany
SO Starch/Staerke (1998), 50(10), 431-437
CODEN: STARDD; ISSN: 0038-9056
PB Wiley-VCH Verlag GmbH
DT Journal
LA English
OSC.G 20 THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (20 CITINGS)
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 33 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI No coagulation disorders under high-dose volume therapy with low-molecular-weight hydroxyethyl starch
AB Hydroxyethyl starch (HES) is often used for volume therapy. Since bleeding complications were reported repeatedly, a strict dose limitation of a maximum of 1500 mL 6% solution/day is recommended. Many indications require higher dosages. Bleeding complications are known to be caused by an acquired von Willebrand syndrome. It was shown that the accumulation of large mols. and their impairment in the coagulation system can be avoided by HES prepns. with a low in vivo mol. weight The effects of a high-dose therapy were not studied yet. The authors have investigated, how a 4-day high-dose therapy, using 3,000 mL 6% HES 70/0.5 on the 1st day and 1,500 mL on days 2-4, affects the coagulation system and hemorheol. parameters of acute stroke patients. Thromboplastin time, activated partial thromboplastin time and thrombin time showed no changes, except for a slight, clin. irrelevant change due to dilution The subunits of von Willebrand factor VIII showed no change. Hematocrit decreased from 42.3 to 37.4 after day 1, reaching 35.3% at the end of the therapy, demonstrating a substantial volume effect. Plasma viscosity and erythrocyte aggregation decreased slightly, however not significantly. Our study shows that even a high-dose therapy with 6% HES 70/0.5 has no influence on the coagulation system.
AN 1998:430987 HCAPLUS <<LOGINID::20101007>>
DN 129:62698
OREF 129:12841a,12844a
TI No coagulation disorders under high-dose volume therapy with low-molecular-weight hydroxyethyl starch
AU Stoll, Martin; Treib, Johannes; Schenk, Joachim F.; Windisch, Florian; Haass, Anton; Wenzel, Ernst; Schimrigk, Klaus
CS Dep. Neurology, Univ. Saarland, Homburg/Saar, D-66421, Germany
SO Haemostasis (1998), Volume Date 1997, 27(5), 251-258
CODEN: HMTSB7; ISSN: 0301-0147
PB S. Karger AG
DT Journal
LA English
OSC.G 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)

L13 ANSWER 34 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Polymeric compositions for purifying apolipoproteins
AB The present invention relates to a composition for use in purification of apolipoprotein A (ApoA) or apolipoprotein E (ApoE), the composition comprising a first and a second polymeric material, wherein the first and second polymeric materials are immiscible in the primary aqueous solution, and wherein the second polymeric material is amphiphilic and water soluble The resulting primary aqueous solution is maintained for a period of time sufficient for essentially separating the phases formed, and removing the phase containing the second polymeric material and the main portion of ApoA or ApoE. Subsequently, the second polymeric material is separated from ApoA or ApoE. The ApoA or ApoE obtained can be used for the manufacture of a medicament in the treatment of atherosclerosis and cardiovascular diseases, sepsis or peripheral atherosclerosis as well as in a method for treatment of atherosclerosis and cardiovascular diseases, sepsis or peripheral atherosclerosis when administered in a therapeutically effective amount The effect on purification and yield of primary aqueous 2-phase separation followed by
temperature-induced phase separation was studied by using ApoA-IM as the target protein. After cell removal, an E. coli fermentation solution containing Apo A-IM was
added to an aqueous solution containing 17% Reppal PES-100, 12% PEG-PPG copolymer and

3.5M urea. The degree of purification and the yield of Apo A-IM were calculated
based on the ELISA results.
AN 1998:183946 HCAPLUS <<LOGINID::20101007>>
DN 128:261925
OREF 128:51763a,51766a
TI Polymeric compositions for purifying apolipoproteins
IN Ageland, Hans; Nystrom, Lena; Persson, Josefine; Tjerneld, Folke
PA Pharmacia & Upjohn AB, Swed.
SO PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811140	A1	19980319	WO 1997-SE1501	19970908 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6559284	B1	20030506	US 1997-924994	19970905 <--
	CA 2277199	A1	19980319	CA 1997-2277199	19970908 <--
	AU 9741429	A	19980402	AU 1997-41429	19970908 <--
	EP 942935	A1	19990922	EP 1997-939314	19970908 <--
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2000513945	T	20001024	JP 1998-513556	19970908 <--
PRAI	SE 1996-3303	A	19960911 <--		
	US 1996-26740P	P	19960926 <--		
	WO 1997-SE1501	W	19970908 <--		

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS)
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 35 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Polymeric compositions for purifying apolipoproteins
AB The present invention relates to a process for purifying a hydrophobic or amphiphilic compound, by first mixing a starting material containing the hydrophobic or amphiphilic compound with a first polymeric material, water and at 1 of a second polymeric material and a surfactant, wherein the first polymeric material and the second polymeric material and/or surfactant are immiscible in the resulting primary aqueous solution The process
further comprises maintaining the primary aqueous solution for a period of time sufficient for essentially separating the phases formed, and then removing the phase containing the main portion of the hydrophobic or amphiphilic compound and
the second polymeric material and/or surfactant. The second polymeric material and/or surfactant are separated from the hydrophobic or amphiphilic compound, and subsequently recycled to the initial mixing step. The present invention further relates to a composition for use in purification of apolipoprotein
A (ApoA) or apolipoprotein E (ApoE), said composition comprising a first polymeric material and a surfactant, said first polymeric material and surfactant being immiscible in the primary aqueous solution obtained after mixing

with water. ApoA or ApoE produced by this process can be used for the manufacture of a medicament in the treatment of atherosclerosis and cardiovascular diseases, sepsis or peripheral atherosclerosis as well as in a method for treatment of atherosclerosis and cardiovascular diseases, sepsis or peripheral atherosclerosis when administered in a therapeutically effective amount The effect on purification and yield of primary aqueous 2-phase separation followed by temperature-induced phase separation was studied by using ApoA-IM as the target protein. After cell removal, an E. coli fermentation solution containing Apo A-IM was added to an aqueous solution containing 8% Reppal PES-100, 16% Breox PAG-50A-1000 and 0-40% Triton X-100. The degree of purification and the yield of Apo A-IM after separation from Reppal PES-100 in the primary step, and from Breox PAG-50A-1000 and Triton X-100 in the temperature-induced phase separation were determined by gel scanning with densitometer.

AN 1998:183934 HCAPLUS <<LOGINID::20101007>>
DN 128:261924
OREF 128:51763a,51766a
TI Polymeric compositions for purifying apolipoproteins
IN Ageland, Hans; Nystrom, Lena; Persson, Josefine; Tjerneld, Folke
PA Pharmacia & Upjohn AB, Swed.
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9811127	A1	19980319	WO 1997-SE1502	19970908 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN				
	RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 6107467	A	20000822	US 1997-924869	19970905 <--
	CA 2265929	A1	19980319	CA 1997-2265929	19970908 <--
	AU 9741430	A	19980402	AU 1997-41430	19970908 <--
	AU 729536	B2	20010201		
	EP 954524	A1	19991110	EP 1997-939315	19970908 <--
	EP 954524	B1	20030409		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	NZ 334589	A	20000728	NZ 1997-334589	19970908 <--
	JP 2001500154	T	20010109	JP 1998-513557	19970908 <--
	AT 236925	T	20030415	AT 1997-939315	19970908 <--
	PT 954524	E	20030829	PT 1997-939315	19970908 <--
	ES 2197361	T3	20040101	ES 1997-939315	19970908 <--
	NO 9901208	A	19990511	NO 1999-1208	19990311 <--
	NO 323217	B1	20070129		
	US 6767994	B1	20040727	US 2000-571683	20000516 <--
	US 20040225120	A1	20041111	US 2004-863456	20040608 <--
	US 7193056	B2	20070320		
PRAI	SE 1996-3304	A	19960911 <--		
	US 1996-26739P	P	19960926 <--		
	US 1997-924869	A1	19970905 <--		
	WO 1997-SE1502	W	19970908 <--		

US 2000-571683 A1 20000516 <--
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OSC.G 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 36 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Coagulation disorders caused by hydroxyethyl starch
AB A review with 86 refs. is given on coagulation disorders caused by hydroxyethyl starch (HES). Initially, HES was only characterized by its in vitro mol. weight (MW). This is not sufficient because HES is degraded in vivo. One relevant parameter that predicts the rate of enzymic breakdown is the degree of substitution, a measure of the average number of hydroxyethyl groups per Glc unit. The higher this degree of substitution, the slower the break-down. In addition, because the Glc units can be substituted at C 2, 3, and 6, different substitution patterns are possible. They are classified by their C2/C6 hydroxyethylation ratio. A higher C2/C6 ratio results in less metabolism of the starch in vivo and results in a larger in vivo MW. This in turn affects therapy, because the larger the in vivo MW, the longer is the duration of the volume effect of HES. Of particular importance is the fact that HES with a high in vivo MW affects factor VIII/von Willebrand factor which can lead to an acquired von Willebrand syndrome. During a 10-day volume therapy with a medium-MW HES 200, a form that is difficult to metabolize, we observed an 80% drop in factor VIII/von Willebrand factor. Therapy with a medium-MW HES 200, a form that is easily degraded, and therapy with a low-MW HES 70 did not result in a relevant decline of factor VIII/von Willebrand factor. This explains why hemorrhagic complications were observed repeatedly in the United States after therapy with HES infusions, some of them lethal. In the United States high-MW HES 480 which is difficult to degrade is most frequently used and results in a larger in vivo MW and subsequent decrease in factor VIII/von Willebrand factor levels. In Europe, medium-MW HES 200 that is easily degraded and low-MW HES 70 are preferred. In the future, HES should be characterized by the in vivo, not the in vitro MW.
AN 1997:603004 HCAPLUS <<LOGINID::20101007>>
DN 127:242743
OREF 127:47199a,47202a
TI Coagulation disorders caused by hydroxyethyl starch
AU Treib, Johannes; Haass, Anton; Pindur, Gerhard
CS Department Neurology, University Saarland, Homburg, D-66421, Germany
SO Thrombosis and Haemostasis (1997), 78(3), 974-983
CODEN: THHADQ; ISSN: 0340-6245
PB Schattauer
DT Journal; General Review
LA English
OSC.G 42 THERE ARE 42 CAPLUS RECORDS THAT CITE THIS RECORD (42 CITINGS)

L13 ANSWER 37 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Increased hemorrhagic risk after repeated infusion of highly substituted medium molecular weight hydroxyethyl starch
AB Infusion of large vols. of high mol. weight hydroxyethyl starch (HES) has been known to lead to coagulation disorders. Medium mol. weight starch is considered a safe alternative, even after repeated administration. In 10 patients with cerebrovascular diseases, a 10-day hemodilution was carried out using 10% HES 200/ 0.62. Initially, a loading dose of 500 mL was administered once over 4560 min, followed by 500 mL maintenance dose per day for 10 days. Its high intravascular mol. weight (120,000 D) showed that cleavage of the starch is slowed due to the higher degree of

substitution. The continuous increase of HES-serum concentration to 27.7 mg/mL gave evidence of a cumulation of poorly degradable mols. Although this caused a prolonged volume effect, plasma viscosity and erythrocyte aggregation were influenced in an unfavorable way. The neg. effects were most evident in their influence on the coagulation system. Under therapy, a significant 42.8% increase in activated partial thromboplastin time occurred. Factor VIII:C, von Willebrand ristocetin cofactor and von Willebrand factor antigen dropped during the therapy below the hemostasiol. limit of 30%, and in some patients below 10%. A high degree of substitution, particularly after repeated infusion, leads to a cumulation of large mols. that are difficult to break down and which unfavorably affect rheol. and hemostasiol. parameters.

AN 1997:93454 HCAPLUS <<LOGINID::20101007>>
DN 126:246632
OREF 126:47554h,47555a
TI Increased hemorrhagic risk after repeated infusion of highly substituted medium molecular weight hydroxyethyl starch
AU Treib, Johannes; Haass, Anton; Pindur, Gerhard; Grauer, Markus T.; Jung, Friedel; Wenzel, Ernst; Schimrigk, Klaus
CS Department Neurology, University Saarland, Homburg, D-66421, Germany
SO Arzneimittel-Forschung (1997), 47(1), 18-22
CODEN: ARZNAD; ISSN: 0004-4172
PB Cantor
DT Journal
LA English
OSC.G 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L13 ANSWER 38 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI The influence of volume therapy and pentoxifylline infusion on circulating adhesion molecules in trauma patients
AB Adhesion mols. appear to play a pivotal role in tissue damage secondary to the inflammatory process. Besides neutrophil-and endothelial-bound adhesion mols., soluble forms have been detected in the circulating blood. They seem to be good markers of endothelial damage, but they may also have other biol. functions. Plasma concns. of soluble adhesion mols. (endothelial leukocyte adhesion mols. (sELAM-1)), intercellular adhesion mol.-1 (sICAM-1), vascular cell adhesion mol.-1 (sVCAM-1), and granule membrane protein 140 (sGMP-140) were serially measured over 5 days by enzyme-linked immunosorbent assays (ELISA) in 45 consecutive trauma patients. These received, by random allocation, only either hydroxyethylstarch solution 10% (mean mol. weight 200 000 Da) (n = 15) or human albumin 20% (n = 15) for volume therapy. Another 15 patients without defined volume therapy received pentoxifylline continuously (1.2 mg.kg-1.h-1). Measurements were carried out on the day of admission to the intensive care unit (baseline) and during the next 5 days. At baseline, plasma concns. of all adhesion mols. were similar in all groups. In the hydroxyethyl starch group, sELAM-1 and sICAM-1 concns. decreased significantly reaching normal values during the study period whereas the mean (SD) values increased in the pentoxifylline group (sELAM-1: 71.1 (16.7) to 91.6 (17.8) ng.ml-1) and the albumin group (sICAM-1: 400 (81) to 749 (101) ng.ml-1). SVCAM-1 increased outside the normal range only in the human albumin group (to 760 ng.ml-1). SGMP-140 plasma concentration increased only in those receiving albumin (432 (85) to 550 (93) ng.ml-1) and this was significantly different to the other groups. None of the other hemodynamic or laboratory factors could be correlated with plasma concns. of the adhesion mols. The authors conclude that volume therapy with hydroxyethyl starch resulted in a decrease in circulating adhesion mols. in the authors' trauma patients. In contrast, volume therapy with albumin did not exert this effect. Continuous infusion

of pentoxifylline did not have a beneficial modulating action on circulating adhesion mols.
AN 1997:48369 HCAPLUS <<LOGINID::20101007>>
DN 126:139669
OREF 126:26839a,26842a
TI The influence of volume therapy and pentoxifylline infusion on circulating adhesion molecules in trauma patients
AU Boldt, J.; Heesen, M.; Padberg, W.; Martin, K.; Hempelmann, G.
CS Department Anaesthesiology and Intensive Care Medicine, Justus-Liebig-University Giessen, Giessen, Germany
SO Anaesthesia (1996), 51(6), 529-535
CODEN: ANASAB; ISSN: 0003-2409
PB Saunders
DT Journal
LA English
OSC.G 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)
RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 39 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Influence of low molecular weight hydroxyethyl starch (HES 40/0.5-0.55) on hemostasis and hemorheology
AB The rheol. parameters erythrocyte aggregation and plasma viscosity were lowered in hemodilution therapy with low mol. weight HES (56-61 kD) compared to therapy with high or medium mol. weight HES. HES does not effect hemostasis (thromboplastin time, thrombin time, fibrinogen concentration).
AN 1996:659040 HCAPLUS <<LOGINID::20101007>>
DN 126:42492
OREF 126:8241a,8244a
TI Influence of low molecular weight hydroxyethyl starch (HES 40/0.5-0.55) on hemostasis and hemorheology
AU Treib, Johannes; Haass, Anton; Pindur, Gerhard; Grauer, Markus T.; Seyfert, Ulrich T.; Treib, Wolfgang; Wenzel, Ernst; Schimrigk, Klaus
CS Department Neurology, University Saarland, Homburg, D-66421, Germany
SO Haemostasis (1996), 26(5), 258-265
CODEN: HMTSB7; ISSN: 0301-0147
PB Karger
DT Journal
LA English
OSC.G 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (10 CITINGS)

L13 ANSWER 40 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI All medium starches are not the same: influence of the degree of hydroxyethyl substitution of hydroxyethyl starch on plasma volume, hemorheologic conditions, and coagulation
AB After the administration of high vols. of high-mol.-weight starch (hetastarch), bleeding complications have repeatedly been observed Later studies showed that the application of medium-mol.-weight starch led to far fewer disturbances of the blood coagulation system. However, the relationships among the degree of hydroxyethyl substitution, the rate of degradation, and the average in vivo mol. weight have not been investigated. A 10-day hemodilution treatment (n = 20) was carried out using two medium-mol.-weight hydroxyethyl starches (HES) with a degree of hydroxyethyl substitution of 0.5 and 0.62, resp. (10% HES 200 was used for a substitution of 0.5 and 6% HES 200 for a substitution of 0.62). After a loading dose of 500 mL was administered, 1000 mL of HES was infused daily for 4 days, and then 500 mL was infused daily for 6 days. The more highly substituted starch was broken down more slowly and eliminated renally. This resulted in a higher intravascular mol. weight than for the less highly substituted HES (120 vs. 84 kDa) and a greater increase in serum

concentration (20.3 vs. 9.0 mg/mL). Initially, the more highly substituted 6-percent HES had a lesser effect on plasma volume ($p<0.01$). Because of HES accumulation, there was no longer a significant difference between the starches by the end of treatment, even though a higher dose of the 10-percent low-substitution starch was infused. Six-percent HES caused an increase in plasma viscosity (+9%, $p<0.01$) that was due to an accumulation of macromols. Ten-percent HES 200/0.5 had no effect on the coagulation system beyond the dilution effect. Six-percent HES, on the other hand, led to an acquired von Willebrand syndrome during the course of the 10-day therapy. Factor VIII function was reduced by 72.2 percent, von Willebrand ristocetin cofactor by 61.3 percent, and von Willebrand factor antigen by 64 percent ($p<0.01$). Thus, it is the intravascular and not the initial (in vitro) mol. weight that dets. the properties of HES. Especially after repeated administration, a high degree of hydroxyethyl substitution leads to an accumulation of macromols. that affect hemorheol. measures and the coagulation system just as adversely as high-mol.-weight starch does. Depending on the degree of substitution, medium-mol.-weight starches can have widely differing properties.

AN 1996:443362 HCAPLUS <<LOGINID::20101007>>
DN 125:158096
OREF 125:29307a,29310a
TI All medium starches are not the same: influence of the degree of hydroxyethyl substitution of hydroxyethyl starch on plasma volume, hemorheologic conditions, and coagulation
AU Treib, J.; Haass, A.; Pindur, G.; Grauer, M.T.; Wenzel, E.; Schimrigk, K.
CS Department of Neurology, University of the Saarland, Homburg, Germany
SO Transfusion (Bethesda, Maryland) (1996), 36(5), 450-455
CODEN: TRANAT; ISSN: 0041-1132
PB American Association of Blood Banks
DT Journal
LA English
OSC.G 39 THERE ARE 39 CAPLUS RECORDS THAT CITE THIS RECORD (39 CITINGS)

L13 ANSWER 41 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Influence of intravascular molecular weight of hydroxyethyl starch on platelets
AB Complications concerning the blood coagulation have been observed repeatedly after administration of highly substituted, high mol. weight hydroxyethyl starch (HES), but it has not been examined as to how intravascular mol. weight and degree of substitution of HES influence platelet number and volume after repeated administration. Thirty patients with cerebrovascular diseases were treated for 10 days with hemo-dilution 500 To 1500 mL of HES 200/0.62 (n=10), HES 200/0.5 (n=10) or HES 40/0.5 (n=10) were infused daily. During the first days, the number of platelets was not lowered beyond the dilution effect, but at the end of the therapy the number of platelets had increased in all 3 groups beyond the initial value. Platelet volume was lowered significantly in the 3 groups. HES 200/0.62 caused the largest drop in platelet volume (-10%, $p<0.01$). A possible explanation could be that HES macromols. are attached to platelets or are phagocytized by them. The larger platelets are then broken down and, to compensate the loss, more thrombocytes are released. A correlation between the mol. weight of HES and the breakdown rate of the platelets can be suspected, because HES 200/0.62 had the highest intravascular mean mol. weight (121 kD) and the largest effect on platelet volume
AN 1996:244160 HCAPLUS <<LOGINID::20101007>>
DN 124:332408
OREF 124:61377a,61380a
TI Influence of intravascular molecular weight of hydroxyethyl starch on platelets
AU Treib, J.; Haass, A.; Pindur, G.; Treib, W.; Wenzel, E.; Schimrigk, K.

CS Dept. Neurology, University the Saarland, Homburg/Saar, D-66421, Germany
SO European Journal of Haematology (1996), 56(3), 168-72
CODEN: EJHAEC; ISSN: 0902-4441
PB Munksgaard
DT Journal
LA English
OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)

L13 ANSWER 42 OF 42 HCAPLUS COPYRIGHT 2010 ACS on STN
TI Effects of 6% hydroxyethyl starch and 3% modified fluid gelatin on intravascular volume and coagulation during intraoperative hemodilution
AB In the perioperative period, artificial colloids are most often infused in doses of 500-1000 mL i.v. This randomized study compared the effects on intravascular volume and coagulation of .apprx.2000 mL of two isooncotic artificial colloids: 6% hydroxyethyl starch (HES; MW 200,000; substitution ratio 0.40-0.55) and 3% modified fluid gelatin (GEL). We hypothesized more pronounced hypocoagulation with HES and a weaker intravascular volume effect of GEL. Forty-two patients, scheduled for primary total hip replacement, were allocated randomly to receive HES or GEL during acute normovolemic hemodilution and subsequent further intraoperative hemodilution. Blood samples were taken before and after 500 mL and 1000 mL of acute normovolemic hemodilution; intraoperatively after 20 mL/kg of artificial colloid and at the end of colloid infusion; on arrival in the recovery room; and 3 h later. We quantified: 1) coagulation variables; 2) blood loss; 3) hemodynamic stability; 4) necessary infusion volume; 5) interstitial extravasation, calculated from plasma vols. measured using albumin marked with technetium-99m and iodine-125, resp.; 6) percentage volume effect at the end of the study as well as hematocrit, total serum protein, and colloid osmotic pressure. Intraoperative volume therapy was guided by radial systolic pressure and systolic pressure variation, mixed venous Hb saturation in the pulmonary artery, and pulmonary capillary occlusion pressure. The following differences (HES vs GEL, P <0.05) were found: 382 vs 725 mL extravasation; 76% vs 56% intravascular volume expansion 7 h after the median point of artificial colloid infusion; 27% vs 29% hematocrit and 35 vs 45 g/L total serum protein on arrival in recovery; 4 vs 0 abnormal bleeding times (>900 s); 3437 vs 2778 mL blood loss. This study quantifies a poorer volume effect of GEL and a higher blood loss with HES. The higher blood loss was significant with one-tailed testing only. These observations warrant extra GEL infusion to avoid hemoreconcn. and caution with large dose HES.
AN 1996:68816 HCAPLUS <<LOGINID::20101007>>
DN 124:193783
OREF 124:35551a,35554a
TI Effects of 6% hydroxyethyl starch and 3% modified fluid gelatin on intravascular volume and coagulation during intraoperative hemodilution
AU Mortelmans, Yves J.; Vermaut, Gerry; Verbruggen, Alfons M.; Arnout, Jef M.; Vermylen, Jos; Van Aken, Hugo; Mortelmans, Luc A.
CS University Hospitals, Katholieke Universiteit Leuven, Louvain, Belg.
SO Anesthesia & Analgesia (Baltimore) (1995), 81(6), 1235-42
CODEN: AACRAT; ISSN: 0003-2999
PB Williams & Wilkins
DT Journal
LA English
OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)